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MEETING OF THE

TRANSPORTATION CONFORMITY WORKING GROUP COMMITTEE

Tuesday, July 25, 2006
10:00 a.m. – 12:00 p.m.

SCAG Offices
818 W. 7th Street, 12th Floor
Riverside A Conference Room
Los Angeles, California 90017
213. 236.1800

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Jonathan Nadler at 213.236.1884 or nadler@scag.ca.gov

SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. If you require such assistance, please contact SCAG at (213) 236-1868 at least 72 hours in advance of the meeting to enable SCAG to make reasonable arrangements. To request documents related to this document in an alternative format, please contact (213) 236-1868.

TRANSPORTATION CONFORMITY WORKING GROUP
INTERAGENCY CONSULTATION
AGENDA

			PAGE #	TIME
1.0	CALL TO ORDER	**Jennifer Bergener, OCTA**		
2.0	WELCOME / INTRODUCTIONS	**Jennifer Bergener, OCTA**		
3.0	PUBLIC COMMENT PERIOD Members of the public desiring to speak on an agenda item or items not on the agenda, but within the purview of this committee, must fill out a speaker's card prior to speaking and submit it to the Staff Assistant. A speaker's card must be turned in before the meeting is called to order. Comments will be limited to three minutes.			
4.0	CHAIR'S REPORT	**Jennifer Bergener, OCTA**		5 minutes
5.0	CONSENT CALENDAR			
5.1	Approval of the June 27, 2006 Meeting Summary **Attachment**	**Jennifer Bergener, OCTA**	1	5 minutes
6.0	INFORMATION ITEMS			
6.1	RTIP Update	**Rosemary Ayala, SCAG**		5 minutes
6.2	RTP Update	**Philip Law, SCAG**		5 minutes
6.3	TCM Update	**Jonathan Nadler, SCAG**		10 minutes
6.4	AQMP Update	**Eyvonne Sells, SCAQMD**		5 minutes
6.5	Qualitative PM Hot Spot Analysis Review **Attachments**	**TCWG Discussion**	4	15 minutes

TRANSPORTATION CONFORMITY WORKING GROUP
INTERAGENCY CONSULTATION
AGENDA

			PAGE #	*TIME*
6.6	PM Hot Spot Requirement Review **Attachments**	**TCWG Discussion**	42	60 minutes
6.8	Information Sharing	**TCWG Discussion**		5 minutes

7.0 ADJOURNMENT — **Jennifer Bergner, OCTA**

The next Transportation Conformity Working Group meeting is currently scheduled for Tuesday, August 28, 2006 at SCAG offices.

Please provide 30 copies of materials you would like to distribute at the meeting. If you have any questions, please contact Jonathan Nadler at (213) 236-1884 or nadler@scag.ca.gov.

The teleconference number is 888.323.9687, code # 39722.

Transportation Conformity Working Group
Interagency Consultation
Meeting Summary

Tuesday, June 27, 2006
10:00 AM – 12:00 PM

Southern California Association of Governments
818 W 7th Street, 12th Floor
Los Angeles, CA 90017
Riverside 'A' Conference Room

The following minutes are intended to **summarize** the matters discussed.
An audiocassette tape of the actual meeting is available for listening in SCAG's office.

1.0 CALL TO ORDER

The meeting was called to order at 10:08 AM by Jennifer Bergener, OCTA.

2.0 WELCOME AND SELF-INTRODUCTIONS

IN ATTENDANCE
Sam Alameddine, Caltrans
Debbie Anderson, City of Riverside
Rosemary Ayala, SCAG
Grace Balimer, FHWA/FTA
Dennis Barton City of Highland
Steve Beswick, City of Temecula
Meenu Chandan, Caltrans District 8
Marlin Feenstra, RCTC
Hans Giroux, City of Riverside
Carol Gomez, SCAQMD
Ashad Hamideh, LAC MTA
Ashraf Habbak, Caltrans
Michael Houlihan, Michael Brandman Assoc.
Edison Jaffery, Caltrans
Jessica Kirchner, SCAG
Keith Lay, LSA Assoc..
Marge Lazarus, City of Moreno Valley
Julian Lester, Environ
Ken Lobeck, RCTC
Tony Louka, Caltrans
Rich Macias, SCAG
Shudeish Mahadev, Parsons
Laleh Modrek, Caltrans District 8
Jonathan Nadler, SCAG
Olufemi Osufalu, Caltrans District 8
Sylvia Patsaouras, SCAG
Lisa Poe, SANBAG
Arnie Sherwood, ITS/UCB/SCAG
David Speirs, Parsons
Alan Thompson, SCAG
Carla Walecka, TCA

VIA TELECONFERENCE
Mike Brady, Caltrans Headquarters
Armand Behtash, Caltrans District 12
Ben Cacatian, Ventura County APCD
Jackie Clayton, Caltrans District 11
Paul Fagan, Caltrans District 8
Maureen Harake, Caltrans District 12
Sandy Johnson, Caltrans District 11
Jean Mazur, FHWA
Roseanna Navarro-Brasington, Mojave Desert/Antelope Valley AQMD
Karina O'Connor, EPA Region 9
Dan Phu, Parsons
Eyvonne Sells, SCAQMD
Susan Sturges, EPA Region 9
Dennis Wade, ARB

3.0 PUBLIC COMMENT PERIOD

There were no public comments at the meeting.

4.0 CHAIR'S REPORT

There was no Chair Report at the meeting.

5.0 Consent Calendar

5.1 Approval of the March 28, 2006 Meeting Summary

MOTION was made to MOVE the summary of the May 23, 2006 meeting.

6.0 INFORMATION ITEMS

6.1 RTIP Update

Staff had concluded its analysis of 2006 RTIP and it is now posted on SCAG's website. The 30 day public review began on June 26th and will end on July 25th. The public hearing is schedule for June 29, at 10:00 a.m., at the SCAG office.

In order to meet conformity determination there are five test that the TIP must meet:

- consistency with the RTP
- the regional emissions analysis
- financial constraint
- timely implementation of transportation control measures
- public review and inter-agency consultation

SCAG is required to have the federal TIP to Caltrans headquarters on August 6. Staff will be going to the Regional Council on July 6 to request that they authorize the Executive Committee to have the authority to approve the release of the TIP.

6.2 TCM Update

Staff has analyzed the TCMs for all of the counties. There is one pending issue to be resolved; a substitution proposed by MTA for the replacement for the Thompson Creek Bicycle Trail (project ID: LA450022). Staff plans to resolve this issue during the public review period. There will be a separate submittal for this particular substitution that includes all of the requirements so the committee will be able to determine if it is an adequate substitution.

All of the TCM lists will be posted on SCAG's website as part of the RTIP. In the future, SCAG hopes to maintain a running list on the web of any TCM project that has been completed as well as any TCM replacement or substitution.

There will be a meeting of the TCM Working Group, on July 13, at SCAG from 2:00 – 4:00 p.m., to begin discussion on staff input to the South Coast AQMP relative to TCMs. Once the TCM's that are circulating as part of the RTIP are finalized, they will be part of staff's input for the AQMP. The current TCM list is not all of SCAG's input, it is just part of it. The TCM Working Group will meet to further discuss the process for TCM identification and substitution prior to the scheduled TCWG meeting.

6.3 RTP Update

Staff went to the Transportation and Communications Committee (TCC) last month to get approval on how staff recommends moving forward with the RTP process. Staff has a two prong approach: 1) prepare a "Gap Analysis" to bring the 2004 RTP into compliance with the provisions of SAFETEA-LU, and 2) continue working towards a full update of the 2007 RTP. SCAG's current schedule is to adopt the next RTP in December 2007. If the Gap Analysis is approved, however, then SCAG can take advantage of the full four year RTP cycle.

The proposed RTP Amendment to add a new Bus Rapid Transit (BRT) project called sbX ("San Bernardino Express") has been posted for public review and comments. There will be a public hearing on July 6 and the comment period closes on July 7.

Staff is still waiting for EPA approval for two TCM substitutions and a question was raised to EPA staff regarding the status of these projects. Karina O'Connor, EPA, reported that the two projects were bundled together and sent t to EPA's Regional Administrator for his concurrence and is assumed to be on its way to EPA headquarters. EPA Region 9 is attempting to get the letter signed by the EPA Administrator some time this month.

6.4 SAFETEA-LU Earmark Project on I-5

Steve Novotny, Caltrans District 7, gave a presentation of the I-5 HOV and truck lane project. The project report and environmental document is scheduled to be completed by June 2008, the design to be completed in January 2010, and construction completion by June 2013. The project was submitted to MTA in the fall of 2005; it was not identified in the 2004 RTP as there was no funding identified for any phases. The project is still not identified in the 2004 RTP or the 2006 TIP but needs to be for the following reasons; 1) to not jeopardize the federal funding that is available, 2) to facilitate environmental document approval by June 2008 and, 3) to improve goods movement.

RTP staff noted that they had not had the opportunity to evaluate the project and that there would be financial implications that would have to be looked at to amend the project into the RTP. Conformity staff commented that the TCWG is not the place to start this request, but rather, Caltrans needs to submit a formal written request to SCAG so that RTP staff can research the request. Caltrans agreed to proceed with a formal request.

6.5 AQMP Update

The SCAQMD is reviewing some of the strategies that were identified at the Air Quality Summit held in June as well as looking at additional emission reduction strategies that will be reviewed internally.

The SC AQMD is still working on the emission inventories and has a target date of October 2006 for the release of the draft AQMP.

6.6 Interagency Review of Projects: PM Hot Spot Analysis

Twenty-two interagency review forms and associated information were submitted for TCWG review to determine whether or not they are "projects of air quality concern" (POAQC) for project-level conformity purposes. Time constraints precluded review of three of these projects. It was announced that future submittals will be reviewed by the TCWG on a first-come-first serve basis. The disposition of each of the projects submitted for the June 2006 TCWG meeting can be found at http://scag.ca.gov/tcwg/projectlist/june06.htm#tcwgPlist0606.

6.7 Information Sharing

There was no information sharing at the meeting.

7.0 ADJOURNMENT

The meeting adjourned at 12:10 P.M.
The next meeting of the TCWG will be on Tuesday, July 25, 2006 at SCAG.

JULY 25, 2006 TCWG: QUALITATIVE PM HOT SPOT ANALYSIS REVIEW

1	SBd713	
2	ORA052	

JULY 25, 2006 TCWG: PM HOT SPOT REQUIREMENT REVIEW

1	RIV45661 *	
2	RIV020907 *	
3	SBD20620 *	
4	SBD200434 *	
5	RIV041052 *	
6	SBD031290	
7	SBD200021	
8	RIV990703	
9	ORA000195	
10	RIV32300	
11	RIV62034 **	
12	RIV1830 **	
13	SBD20020812 **	

* Submitted at previous TCWG meeting, but not heard due to time constraints
** Received after submittal deadline

TCWG July 25, 2006

Qualitative PM Hot Spot Analysis Review

SBd713 (I-215)

ORA052 (FTC-S)

Qualitative PM Hot Spot Analysis

Sbd713

RTIP ID# 713

Project Description *(clearly describe project)*

I-215 corridor North from Rte 10 to Rte 30 – Add 2 mixed flow lanes, 1 in each direction.

I-215 corridor North – In San Bernardino, on I-215 form Rte 10 to Rte 210 – Add 2 HOV lanes, 1 in each direction and operational improvements including auxiliary lanes and CD roads.

Type of Project *(use Table 1 on instruction sheet)*

Change to existing state highway

County	**Narrative Location/Route & Postmiles** SBd /215/PM 4.1 -10.1
San Bernardino	**Caltrans Projects – EA#** 00713

Lead Agency: Caltrans

Contact Person	**Phone#**	**Fax#**(909) 383-6494	**Email**
Tony Louka	(909) 383-6385		Tony_louka@dot.ca.gov

Hot Spot Pollutant of Concern *(check one or both)* *PM2.5* X **PM10**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)	**EA or Draft EIS**	**FONSI or Final EIS**	X **PS&E or Construction**	**Other**

Scheduled Date of Federal Action: July –September 2006, RW E-76, AAA Concur, PSE approval

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start			10/06,8/07,8/08	1/15/07, 5/07
End		10/08,8/1/06,12/06		7/15/09,12/09

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

The average daily traffic (ADT) for north and south bound combined varies between 86,600 and 168,100 from Segment 3 to Segment 5. The ADT is expected to increase to between 160,000 and 274,500 in the year 2030. In the form the most representative ADT is taken which is in the Northbound (NB) direction. Note that the completed SR 210 was included in the model as a major traffic generator during reverse peak periods. In the early 1970s it was recognized that due to projected traffic volumes and existing operational characteristics, access and safety improvements were warranted for this section of I-215. The proposed project will improve safety and capacity through improved operational characteristics, including removal of left hand on and off ramps merging into the number 1 mixed flow lane.

According to traffic counts and observations, the existing facility becomes congested to a point of stop-and-go traffic flow at about 1600 vehicles per lane per hour, or 9600 vehicles per hour for the six-lane freeway. This is due to the presence of left entrance and exit ramps and other design characteristics such as: interchange spacing, partial interchanges, and weaving distances. Existing peak-hour traffic volumes are above the capacity of the freeway from approximately I-10 to the I-215/SR-259 Interchange. Ramp capacities are also observed in the project area, particularly at Orange Show Road and Inland Center Drive, where peak-hour traffic queues far enough to extend into freeway travel lanes. In accordance with projected increases in populations and development, future traffic volumes are anticipated to increase significantly in comparison to today's volumes.

The existing I-215 freeway was built to design standards acceptable for its time of construction and type of facility. This project will upgrade this section of highway to current Highway Design Standards where feasible.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

Land uses adjacent to I-215 within the project limits are primarily urbanized consisting of residential. The existing facility consists of 3 mixed flow lanes in each direction that incorporates a southbound auxiliary lane between Inland Center Drive and 2nd Street, which was constructed in 1999. This has been the only significant change to the existing facility since

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Build ADT with trucks year 2003 (NB) 34,600 –97,600; ADT Trucks; % Truck; # Trucks

No Build ADT with trucks year 2003 (NB) 34,600 –97,600; ADT Trucks; % trucks %; # trucks

The various segments of the existing freeway operate between Levels of Service (LOS) E and F (PM) for the northbound direction, and between LOS D and E (AM) in the southbound direction.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Build ADT Horizon year 2030 (NB) 51,300-144,300; ADT Trucks 4030-7810; % Trucks 7.8% - 5.4%;

No Build ADT with trucks year 2030 (NB) 45,500-128400; ADT Trucks 3590-6950; % Trucks 7.9% - 5.4%

Increase in Trucks traffic from no builds to Build 440- 860 trucks; % increase in trucks 0.6% to 0.9%. This not a significant increase

All freeway segments will operate at LOS F in the year 2030 no build condition

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

The various segments of the existing freeway operate between Levels of Service (LOS) E and F (PM) for the northbound direction, and between LOS D and E (AM) in the southbound direction. All freeway segments will operate at LOS F in the year 2030 no build condition. The preferred alternative calls for the construction of a Braided Ramp/Split Diamond System to implement the proposed project. The LOS is significantly improved for the build option, which includes one HOV lane and a fourth mixed flow lane in each direction.
The VA Traffic Study for the proposed design variation showed a few areas along the corridor where there was still LOS F. To mitigate these areas, auxiliary lanes were added to facilitate weaving and to bring the LOS up to E. Specific areas addressed were between Mill and 2nd Street and between 5th and Baseline.

Comments/Explanation/Details *(attach additional sheets as necessary)*
Narrative Attach additional sheets as necessary; include reason why POAQC or Not POAQC decision is appropriate

This is considered to be a project of Air quality concern. The attached report elaborates that the implementation of the project would not adversely affect the local air quality. The no-build vs. build traffic information indicates that there is not a significant increase in truck traffic (less than 1%,). Furthermore, the proposed improvements would reduce traffic congestion, improve local access, and improve existing roadway elements to current design standards. The improvement in flow would result in higher travel speeds. Diesel trucks produce fewer PM2.5 emissions at higher speeds and the project would be expected to reduce emissions from individual diesel trucks relative to conditions without the project.

Draft Project-Level Conformity Determination Air Quality Fine Particulate Matter ($PM_{2.5}$)

Interstate 215 (I-215) Widening/ Reconstruction Project from Orange Show Rd. to I-210/ I-215 Interchange San Bernardino, California

I. PURPOSE OF THIS DOCUMENT

The *Clean Air Act section 176(c)* requires that federally supported highway and transit project activities are consistent with state air quality goals, found in the *state implementation plan* (SIP). The process to ensure this consistency is called Transportation Conformity. Conformity to the SIP means that transportation activities will not cause new violations of the *national ambient air quality standards* (NAAQS or "standards"), worsen existing violations of the standard, or delay timely attainment of the relevant standard.

Transportation conformity is required for federal supported transportation projects in areas that have been designated by the U.S. Environmental Protection Agency (EPA) as not meeting a NAAQS. These areas are called *nonattainment areas* if they currently do not meet air quality standards or *maintenance areas* if they have previously violated air quality standards, but currently meet them and have an approved *Clean Air Act section 175A* maintenance plan.

The project is located in the South Coast Air Basin (SCAB). The U.S. Environmental Protection Agency (EPA) classifies this air basin as nonattainment for federal $PM_{2.5}$[1] ambient standards. This project is a STAA truck route and increases the number of diesel trucks that would utilize the facility. The ***Surface Transportation Assistance Act*** (*STAA*) of 1982 allows large trucks to operate on the Interstate and certain primary routes called collectively the National Network. These trucks, referred to as *STAA* trucks, are longer than California legal trucks. As a result, *STAA* trucks have a larger turning radius than most local roads can accommodate.

Interstate 215 in the project area is not listed as a "Major International Trade Highway Route" in the California Goods Movement Action Plan (http://www.arb.ca.gov/gmp/gmp.htm) as of June 2006.

Interstate 215 in the project area does not now, and is not projected to, carry more than 10,000 trucks per day. However, because the project adds both High Occupancy Vehicle and mixed flow lanes to a major freeway, and because the project would accommodate a significant (more than 5%) increase in trucks from the No Project scenario in an urbanized area with nearby sensitive receptors (primarily residential development), it was determined that this is a project of air quality concern. A conformity determination for fine particulate matter ($PM_{2.5}$) is required for any, federal approval or authorization

[1] EPA posted the final rule on its website on March 1, 2006 and the final rule was published in the Federal Register on March 10, 2006.

subsequent to April 5, 2006, when conformity for the $PM_{2.5}$ NAAQS became applicable to the area.

EPA amended the Transportation Conformity rule on March 10, 2006[2], requiring a hot-spot analysis to determine project-level conformity in $PM_{2.5}$ and PM_{10} nonattainment and maintenance areas. A hot spot analysis is an assessment of localized emissions impacts from a proposed transportation project and is only required for "projects of air quality concern." The March 10, 2006 rule provides examples of projects of air quality concern. The $PM_{2.5}$ and PM_{10} hot-spot requirements in the final rule became effective April 5, 2006. Project level conformity determinations are required pursuant to *40 CFR §93.116. and §93.123.*

Figure 1: Regional Vicinity Map for I-215 Widening/ Reconstruction Project

[2]USEPA: Last updated July 2006; URL: http://www.epa.gov/oar/oaqps/greenbk/

II. PROJECT DESCRIPTION

Existing Facility
The existing facility consists of two to three mixed flow lanes in each direction. In 1999, one auxiliary lane in the Northbound (NB) and Southbound (SB) direction was added between Inland Center Drive and Mill Street and between Mill Street and 2nd Street. Land uses adjacent to I-215 within the project limits are primarily urbanized, consisting of residential, commercial and industrial uses.

Proposed Project Description
It is proposed to add a high occupancy vehicle (HOV) lane and a mixed flow lane in each direction to I-215 in the City of San Bernardino between Orange Show Road and 27th Street to reduce congestion and improve safety. The project will also include removing or modifying existing ramps and interchanges, adding auxiliary lanes, and improvements to local arterial streets in the vicinity of modified interchanges. The project is divided for funding and construction staging purposes into five segments that will be designed and constructed independently. The limits of the segments are as follows:

- 007171, Segment 3: 400m s/o Orange Show Rd. to Rialto Ave. (Const. 5/7/07-12/28/09)- KP 6.6/10.8
- 0071A1, Segment 1: Rialto Ave. to 9th St. (Const. 3/17/08-3/17/11)- KP 10.8/12.1
- 0071C1, 5th St. (Rte 66) Early Bridge Construction (Const. 1/15/07-7/15/09)- KP 11.6
- 007161, Segment 2: 9th St. to 400m n/o 16th St. (Const. 3/17/09-3/17/13)- KP 12.1/14.4
- 007191, Segment 5: 400m n/o 16th St. to SR-210 (Const. 1/3/11-1/3/13)- KP 14.4/16.1

Funding programs and the conforming regional Transportation Improvement Program require that the segments be approved for right of way acquisition and construction purposes no later than the following dates, in order to use funds when available and achieve the open-to-traffic dates assumed in the regional Transportation Control Measure analysis. The HOV lane component of this project is considered a Transportation Control Measure.

- August 20,2006: Segment 1, 2 and 3 (Right of Way acquisition funding)
- August 30, 2006: Early Bridge project (Construction approval)
- December 11, 2006: Segment 3 (Construction funding)
- October 1, 2007: Segment 1 (Construction funding)
- January 2008: Segment 5 (Right of Way acquisition funding)
- October 1, 2008: Segment 2 (Construction funding)
- July 15, 2010: Segment 5 (Construction funding)

Need and Purpose

The Average daily traffic (ADT) varies between 86,600 and 168,100 from Segment 3 to Segment 5. The ADT is expected to increase to between 160,000 and 274,500 in the year 2030. The completed State Route 210 (SR 210) was included in the model as a major traffic generator during reverse peak periods. In the early 1970s it was recognized that due to projected traffic volumes and existing operational characteristics, access and safety improvements were warranted for this section of I-215. The proposed project will improve operational characteristics, including removal of left hand on and off ramps merging into the number 1 mixed flow lane.

According to traffic counts and observations, the existing facility becomes congested to a point of stop-and-go traffic flow at about 1600 vehicles per lane per hour, 9600 vehicles per hour for the six-lane freeway. This is due to the presence of left entrance and exit ramps and other design characteristics such as: interchange spacing, partial interchanges, and weaving distances. Existing peak-hour traffic volumes are above the capacity of the freeway from approximately I-10 to the I-215/ SR-259 Interchange. Peak-hour traffic at ramps queues far enough to extend into freeway travel lanes, especially at Orange Show Road and Inland Center Drive.

The existing I-215 freeway was built to design standards acceptable for its time of construction and type of facility. This project will upgrade this section of highway to current Highway Design Standards where feasible.

Alternatives

Alternative 1: No Build

The No Build Alternative will not resolve the I-215 capacity deficiency, congestion problems and safety issues within the project limits. Without highway improvements, traffic congestion will continue to worsen along I-215. Extended hours of congestion will increase emissions from traffic, including trucks.

Alternative 2: Preferred Alternative

Add one HOV lane and one additional mixed flow lane in each direction on I-215 from Orange Show Road to 27th Street in the City of San Bernardino. Other improvements include removing or modifying existing ramps and interchanges, auxiliary lanes, and improvements to the local arterial streets in the vicinity of modified interchanges. The project will widen the freeway about centerline from Orange Show Road to Rialto Avenue and realign the freeway from Rialto to 27th Street. In order to provide sufficient weave distance between the Orange Show Road and Inland Center Drive Interchanges, the entrance and exit ramps will be braided by the use of bridge structures and retaining walls to create two independent diamond interchanges (Type L-3, Highway Design Manual). The segment between Rialto Avenue and 9th Street will be reconstructed horizontally and vertically in the NB and SB directions.

The preferred alternative proposes the construction of a Split Diamond Interchange System at 2nd and 3rd Street with braided ramps between 3rd Street and 5th Street. The segment between 9th Street and 16th Street will reconstruct all the existing NB and SB hook and fly-over ramps. The proposed entrance and exit ramps will be reconstructed to tie in directly to Baseline as a modified diamond interchange. Due to the close interchange spacing between Baseline and SR 259, the proposed improvements will consist of braided ramps between the interchanges. The NB on-ramp from Baseline

provides a slip ramp connection to SR 259. The SB off-ramp to Baseline from I-215 connects with an off-ramp from SR 259. The Highland Avenue interchange will be reconstructed and reconfigured to improve operations.
The majority of the freeway will be completely reconstructed in Segments 1 and 2 and the existing structural section will be removed. However, the Redlands Loop Overhead (Br. No. 54 089) and Rialto Avenue Overcrossing (Br. No. 54 088) will remain. In Segment 3, Orange Show Road to Rialto Avenue, the freeway will not be completely reconstructed, nor will the structural section be completely removed. In Segment 3, the freeway will be widened to the outside. A new structural section will be constructed in accordance with the Materials Report and conform to the new freeway alignment.

High Occupancy Vehicle (HOV) Lanes

An HOV Report was prepared and concluded that the proposed HOV lanes would operate in year 2015 at traffic LOS C and the adjacent mixed-flow lanes would operate LOS E. If additional mixed-flow lanes are constructed instead of the HOV lanes, the freeway will operate at LOS F in year 2015.

Railroad Involvement

The Burlington Northern Santa Fe (BNSF) tracks run parallel to I-215 from 3rd Street to 27th Street. Additionally, Metrolink maintains the Redlands Loop track which crosses under I-215 south of Rialto Avenue. The Redlands Loop right of way is owned by SANBAG. Metrolink may operate trains along this right of way in the future.

III. BACKGROUND

What is Particulate Matter (PM)?

Airborne particulate matter (PM) consists of many different substances suspended in air in the form of particles (solids or liquid droplets) that vary widely in size. The particle mix in most U.S. cities is dominated by fine particles (less than 2.5 micrometers in diameter) generated by combustion sources, with smaller amounts of coarse dust (between 2.5 and 10 micrometers in diameter). Particles less than 10 micrometers in diameter include both fine and coarse dust particles. These particles pose the greatest health concern because they can pass through the nose and throat and get into the lungs. Particles larger than 10 micrometers in diameter that suspend in the air are referred to as total suspended particulates (TSP). These larger particles can cause irritation to the eyes, nose and throat in some people, but they are not likely to cause more serious problems since they do not get down into the lungs.

Motor vehicles (*i.e.*, cars, trucks, and buses) emit direct PM from their tailpipes, as well as from normal brake and tire wear. In addition, vehicles cause dust from paved and unpaved roads to be re-entrained, or re-suspended, in the atmosphere. In addition, highway and transit project construction may cause dust. Finally, gases in vehicle exhaust may react in the atmosphere to form PM. Particles come in a wide variety of sizes and have been historically assessed based on size, typically measured by the diameter of the particle in micrometers. $PM_{2.5}$, or fine particulate matter, refers to particles that are 2.5 micrometers in diameter or less. (*Note*: A human hair is about 70 micrometers in diameter and a grain of sand is about 90 micrometers in diameter). The National Ambient Air Quality Standards (NAAQS) for fine particulate matter include an annual standard (15.0 micrograms per cubic meter (ug/m3)) and a 24-hour standard (65 ug/m3). The annual standard is based on a 3-year average of annual mean $PM_{2.5}$ concentrations; the 24-hour standard is based on a 3-year average of the 98th percentile of 24-hour concentrations.

Statutory Requirements for PM Hotspot Analyses

On March 10, 2006, EPA issued amendments to the Transportation Conformity Rule to address localized impacts of particulate matter: "$PM_{2.5}$ and PM_{10} Hot-Spot Analyses in Project-level Transportation Conformity Determinations for the New $PM_{2.5}$ and Existing PM_{10} National Ambient Air Quality Standards" (*71 FR 12468*). This rule amendment requires the assessment of localized air quality impacts of Federally-funded or approved transportation projects in PM_{10} and $PM_{2.5}$ nonattainment and maintenance areas deemed to be *projects of air quality concern.*[3] This assessment of localized impacts (*i.e.*, "hot-spot analysis") examines potential air quality impacts on a scale smaller than an entire nonattainment or maintenance area. Such an analysis is a means of demonstrating that a transportation project meets Clean Air Act conformity requirements to support State and local air quality goals.

[3] Criteria for identifying projects of air quality concern is described in 40 CFR 93.123(b)(1), as amended

If a project still requires a Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) approval or authorization, a project-level conformity determination will be required prior to the first such action on or after April 5, 2006, even if the project has already completed the National Environmental Policy Act (NEPA) process. After project-level conformity is determined for a project, a new conformity determination is only required under the scenarios discussed in 40 CFR 93.104(d).[4]

Qualitative hot-spot analysis is required for these projects before EPA releases its future quantitative modeling guidance and announces that quantitative $PM_{2.5}$ hot-spot analyses are required under *40 CFR §93.123(b)(4)*. EPA requires hot-spot findings to be based on directly emitted $PM_{2.5}$, since secondary particles take several hours to form in the atmosphere giving emissions time to disperse beyond the immediate area of concern. The Conformity Rule requires $PM_{2.5}$ hot-spot analyses to include road dust emissions only if such emissions have been found significant by EPA or the state air agency prior to the $PM_{2.5}$ SIP or as part of an adequate $PM_{2.5}$ SIP motor vehicle emissions budget (*40 CFR §93.102(b)(3)*). Emissions resulting from construction of the project are not required to be considered in the hot-spot analysis if such emissions are considered temporary according to *40 CFR §93.123(c)(5)*.

Construction activities produce combustion emissions from various sources, such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions during the construction envisioned on site will vary daily as construction activity levels change. The use of construction equipment on site will result in localized exhaust emissions. Caltrans Standard Specifications for construction (Section 10 and 18 for dust control and Section 39-3.06 for asphalt concrete plant) will be adhered to in order to reduce emissions as a result of construction equipment. In order to further minimize construction-related emissions, all construction vehicles and construction equipment would be required to be equipped with the state-mandated emission control devices pursuant to state emission regulations and standard construction practices.

The $PM_{2.5}$ and PM_{10} hot-spot requirements in the final rule became effective April 5, 2006. A qualitative $PM_{2.5}$ and PM_{10} hot-spot analysis that meets the final rule's requirements must be completed for project-level determinations for projects of air quality concern completed on or after April 5, 2006.

[4] 40 CFR 93.104 (d) states, "FHWA/FTA projects must be found to conform before they are adopted, accepted, approved or funded. Conformity must be redetermined for any FHWA/FTA project if one of the following occurs: a significant change in the project's design concept and scope; three years elapse since the most recent major step to advance the project; or initiation of a supplemental environmental document for air quality purposes. Major steps include NEPA process completion; start of final design; acquisition of a significant portion of the right-of-way; and, construction (including Federal approval of plans, specifications and estimates)."

IV. Regional Conformity Determination

Section 176(c) of the Clean Air Act and the federal conformity rule require that transportation plans and programs conform to applicable state air quality implementation plans (SIPs) and Section 174 and 176(c) and (d) of the Clean Air Act (42 U.S.C. 7504, 7506(c) and (d)). The proposed project is included in the 2004 Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) was found to be conforming by FHWA and FTA on June 7, 2004 and is fully programmed in the 2004 Regional Transportation Improvement Program (RTIP). The project is also in the 2004/05 – 2009/10 RTIP, which was found to be conforming by FHWA and FTA on October 4, 2004. Project design concept and scope are also consistent with the project description in the RTP and Federal Transportation Improvement Program (FTIP). The FTIP was approved on October 4, 2004.
The following project information is excerpted from the RTIP:

Description - I-215 Corridor North- In SBd, on I-215 from Rte 10 to Rte 210- add 2 HOV lanes one in each direction and operational improvements including auxiliary lanes and collector distributor roads.
Project ID# - 713_SBd-215
Air Basin – SCAB
Model# - S298
Program Code – CAX69
Route – 215
Begin Post Mile – 4.1
End Post Mile – 10.1

Description - I-215 corridor north from Rte 10 to Rte 30 – Add 2 mixed flow lanes, 1 in each direction.
Project ID# - 200444_SBd-215
Air Basin – SCAB
Model # - S353
Program Code – CAX59
Route – 215
Begin Post Mile – 4.1
End Post Mile – 10.1

V. Climate and Meteorology of the South Coast Air Basin

The proposed project site is located in San Bernardino, an area within the South Coast Air Basin (Basin) that includes Orange, Los Angeles (non-desert portions), western Riverside County, and southwestern San Bernardino County. The South Coast Air Quality Management District (SCAQMD) carries out air quality planning and administers air quality regulations in the Basin.

The terrain and its geographic location determine the Basin climate. The Basin is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern boundary and mountains surround the rest of the Basin. The region lies in the semi-permanent high-pressure zone of the eastern Pacific. The resulting climate is generally mild and tempered by ocean breezes. This climatological pattern is occasionally interrupted, by periods of extremely hot weather, winter storms, and Santa Ana wind conditions. The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s Fahrenheit. With increasing distance from the coast, depending to some extent upon the amount of marine influence experienced, temperature ranges become greater, especially in the mountain areas. The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin along the coastal side of the mountains.

The proposed project is located in San Bernardino County. Using the 30-year monthly climate summary, from 1971 to 2000, from the Western Region Climate Center's San Bernardino meteorological station (#047723), the average minimum temperature is 41.3 degrees Fahrenheit in the month of December. The average maximum summertime temperature is 95.6 degrees Fahrenheit in the month of July. The rainfall season is from November to April with a 30-year annual average of 16.33 inches.

VI. $PM_{2.5}$ Hot Spot Analysis

According to *40 CFR §93.123(b)(2) and (4)*, a quantitative analysis for applicable projects is not required until EPA releases modeling guidance in the Federal Register. However, a qualitative hot spot analysis is still required. For this project, a qualitative project-level hot-spot assessment was conducted in order to assess whether the project will cause or contribute to any new localized $PM_{2.5}$ violations, or increase the frequency or severity of any existing violations, or delay timely attainment of the $PM_{2.5}$ NAAQS.

The designation for $PM_{2.5}$ cites the SCAB with the status of nonattainment per federal designation.

$PM_{2.5}$ nonattainment and maintenance areas are required to attain and maintain two standards:

- 24-hour standard – 65 $\mu g/m^3$, and
- Annual standard – 15 $\mu g/m^3$

The current 24-hour standard is based on a 3-year average of the 98^{th} percentile of 24-hour $PM_{2.5}$ concentrations; the current annual standard is based on a 3-year average of annual mean $PM_{2.5}$ concentrations.
$PM_{2.5}$ hot-spot analysis must consider both standards, unless it is determined for a given area that meeting the controlling standard would ensure that Clean Air Act requirements are met for both standards.
The nearest $PM_{2.5}$ monitoring station is located at San Bernardino – 4^{th} Street. The data from 2003-2005 are provided in Table 1.

Table 1: $PM_{2.5}$ Data at San Bernardino – 4th Street ($\mu g/m^3$)

Year:	2003		2004		2005	
	Date	Measurement	Date	Measurement	Date	Measurement
National:						
First High:	Oct 6	73.9	Jul 5	93.4	Oct 22	106.2
Second High:	Oct 9	62.5	Mar 19	81.9	Nov 6	45.3
Third High:	Mar 13	58.4	Mar 22	72.4	Mar 8	43.4
Fourth High:	Jun 8	55.1	Jan 19	69.3	May 4	35.0
California:						
First High:	Oct 6	73.9	Jul 5	93.4	Oct 22	106.2
Second High:	Oct 9	62.5	Mar 19	81.9	Nov 6	45.3
Third High:	Mar 13	58.4	Mar 22	72.4	Mar 8	43.4
Fourth High:	Jun 8	55.1	Jan 19	69.3	May 4	35.0
# Days Above Nat'l Standard:		1		4		1
3-Year Average 98th Percentile:		64		66		58
1-Year 98th Percentile:		58.4		72.4		43.4
National 3-Year Average:		24		23		20
National Annual Average:		22.2		21.9		17.4
State 3-Yr Maximum Average:		26		26		22
State Annual Average:		22.2				

http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4b.d2w/Branch

The trend of the annual averages for $PM_{2.5}$ for the period 2003 –2005 was downward. The unusual number of exceedances for $PM_{2.5}$ may be a result of extensive wildfires in San Bernardino area on January 19th, March 19th, March 22nd, and July 5th of 2004.

In the SCAG region, the South Coast Air Basin (SCAB) is the only area that has been designated by EPA as the $PM_{2.5}$ nonattainment area with attainment year 2015.

Current and Forecasted Traffic

The 2003 traffic volumes and projected 2030 traffic volumes for the various segments are presented in Table 2 and Table 3. Also, the 2003 traffic volumes and projected 2013 traffic volumes for various segments are presented in Table 4 and Table 5.

Table 2: I-215 Traffic Forecasts No Build Scenario, 2030

Location	2003 ADT w/o Trucks	2003 Truck ADT	2003 Total ADT	2030 ADT w/o Trucks	2030 Truck ADT	2030 Total ADT	2030 no-build Truck %
NORTH BOUND							
SR-215 North of I-10	92,300	5,280	97,600	121,500	6,950	128,400	5
SR215 N.of Orange Show Rd off ramp	65,500	4,030	69,500	88,600	5,450	94,000	6
SR215 N.of Inland Center Dr on ramp	74,500	4,380	78,900	101,300	5,950	107,100	6
SR215 N. of Mill St. on ramp	79,200	4,610	83,800	106,900	6,210	112,900	6
SR215 N. of 5th St. off ramp	57,800	3,620	61,400	80,300	5,010	85,000	6
SR-215 North of 5th St on ramp	69,500	3,820	73,300	103,100	5,650	108,300	5
SR-215 N. of Baseline off ramp	59,400	3,500	62,900	86,900	5,100	91,600	6
SR-215 North of SR-259	37,200	2,680	39,900	54,200	3,870	57,700	7
SR-215 North of Highland	31,900	2,730	34,600	42,300	3,590	45,500	8
SOUTH BOUND							
SR-215 South of 27th St	44,900	1,840	46,700	81,200	3,330	84,600	4
SR-215 South of SR-259	76,200	2,810	79,000	120,100	4,430	124,600	4
SR-215 south of Baseline on ramp	84,400	3,310	87,700	130,600	5,130	135,800	4
SR-215 S. of 2nd St off ramp	71,100	2,720	73,800	104,600	4,000	108,600	4
SR-215 S. of 2nd St on ramp	85,800	3,400	89,200	126,900	5,030	132,000	4
SR215 north of Inland ctr Dr	78,500	3,100	81,600	113,500	4,480	118,000	4
SB215 S. of Orange Show off ramp	68,000	2,480	70,500	101,000	3,680	104,700	4
SR-215 Sth of Orange Show Rd	84,800	3,420	88,200	121,700	4,910	126,700	4

Table 3: I-215 Traffic Forecast Braid-Split Alternative Volumes, 2030

Location	2003 ADT w/o Trucks	2003 Truck ADT	2003 Total ADT	2030 ADT w/o Trucks	2030 Truck ADT	2030 Total ADT	Diff. between build and no-build 2030 truck ADT	Diff. Between build and no-build 2030 total ADT	Build 2030 Truck %
NORTH BOUND									
SR-215 North of I-10	92,300	5,280	97,600	136,500	7,810	144,300	860	15,900	5
SR215 N.of Orange Shw Rd off ramp	65,500	4,030	69,500	99,500	6,130	105,600	680	11,600	6
SR215 N.of Inland Cntr Dr on ramp	74,500	4,390	78,900	113,700	6,700	120,400	750	13,300	6
SR215 N. of Mill St. on ramp	79,200	4,610	83,800	120,000	6,990	127,000	780	14,100	6
SR215 N. of 5th St. off ramp	57,800	3,620	61,400	90,000	5,640	95,700	630	10,700	6
SR-215 North of 5th St on ramp	69,500	3,820	73,300	115,500	6,350	121,900	700	13,600	5
SR-215 N. of Baseline off ramp	59,400	3,500	62,900	97,300	5,730	103,100	630	11,500	6
SR-215 North of SR-259	37,200	2,670	39,900	60,600	4,350	65,000	480	7,300	7
SR-215 North of Highland	31,900	2,720	34,600	47,200	4,030	51,300	440	5,800	7.9
SOUTH BOUND									
SR-215 South of 27th St	44,900	1,840	46,700	91,300	3,740	95,000	410	10,400	4
SR-215 South of SR-259	76,200	2,810	79,000	135,000	4,980	140,000	550	15,400	4
SR-215 south of Baseline on ramp	84,400	3,320	87,700	146,800	5,770	152,600	640	16,800	4
SR-215 S. of 2nd St off ramp	71,100	2,720	73,800	117,500	4,500	122,000	500	13,400	4
SR-215 S. of 2nd St on ramp	85,800	3,400	89,200	142,600	5,660	148,300	630	16,300	4
SR215 north of Inland ctr Dr	78,500	3,110	81,600	127,500	5,050	132,600	570	14,600	4
SB215 S. of Orange Show off ramp	68,000	2,490	70,500	113,400	4,150	117,600	470	12,900	4
SR-215 Sth of Orange Show Rd	84,800	3,420	88,200	136,700	5,520	142,300	610	15,600	4

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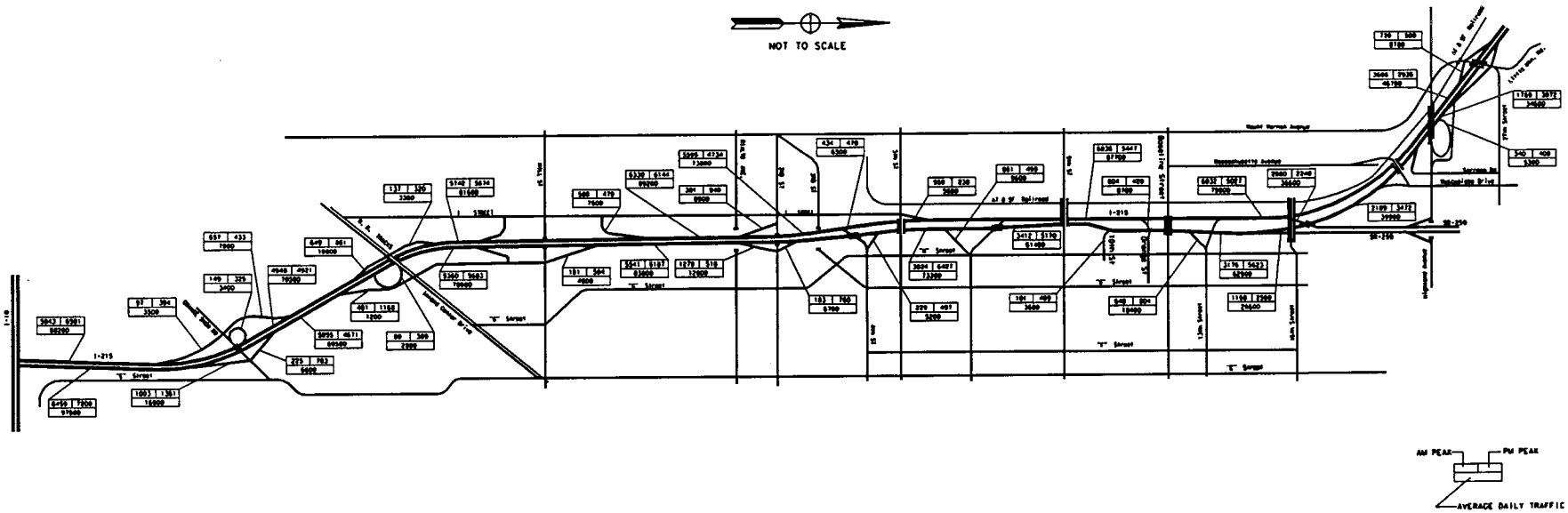
Table 4: I-215 Traffic Forecasts Braid Split Alternative Volumes, 2013

Location	2003 ADT	2013 ADT w/o Trucks	2013 Truck ADT	2013 Total ADT
NORTH BOUND				
SR-215 North of I-10	97,600	108,700	6,220	114,900
SR215 N.of Orange Shw Rd off ramp	69,500	78,100	4,810	82,900
SR215 N.of Inland Cntr Dr on ramp	78,900	89,100	5,250	94,300
SR215 N. of Mill St. on ramp	83,800	94,300	5,490	99,800
SR215 N. of 5th St. off ramp	61,400	69,700	4,370	74,100
SR-215 North of 5th St on ramp	73,300	86,500	4,760	91,300
SR-215 N. of Baseline off ramp	62,900	73,500	4,320	77,800
SR-215 North of SR-259	39,900	45,900	3,290	49,200
SR-215 North of Highland	34,600	37,600	3,210	40,800
SOUTH BOUND				
SR-215 South of 27th St	46,700	62,100	2,540	64,600
SR-215 South of SR-259	79,000	98,000	3,610	101,600
SR-215 south of Baseline on ramp	87,700	107,500	4,220	111,700
SR-215 S. of 2nd St off ramp	73,800	88,300	3,380	91,700
SR-215 S. of 2nd St on ramp	89,200	106,900	4,240	111,100
SR215 north of Inland ctr Dr	81,600	96,700	3,830	100,500
SB215 S. of Orange Show off ramp	70,500	84,800	3,100	87,900
SR-215 Sth of Orange Show Rd	88,200	104,000	4,200	108,200

Table 5: I-215 No-Build Traffic Forecasts, 2013

Location	2003 ADT	2013 ADT w/o Trucks	2013 Truck ADT	2013 Total ADT
NORTH BOUND				
SR-215 North of I-10	97,600	103,100	5,900	109,000
SR215 N.of Orange Shw Rd off ramp	69,500	74,000	4,560	78,600
SR215 N.of Inland Cntr Dr on ramp	78,900	84,300	4,960	89,300
SR215 N. of Mill St. on ramp	83,800	89,400	5,200	94,600
SR215 N. of 5th St. off ramp	61,400	66,000	4,130	70,100
SR-215 North of 5th St on ramp	73,300	81,800	4,500	86,300
SR-215 N. of Baseline off ramp	62,900	69,400	4,090	73,500
SR-215 North of SR-259	39,900	43,400	3,120	46,500
SR-215 North of Highland	34,600	35,600	3,050	38,600
SOUTH BOUND				
SR-215 South of 27th St	46,700	58,300	2,390	60,700
SR-215 South of SR-259	79,000	92,500	3,410	95,900
SR-215 south of Baseline on ramp	87,700	101,500	3,990	105,500
SR-215 S. of 2nd St off ramp	73,800	83,500	3,190	86,700
SR-215 S. of 2nd St on ramp	89,200	101,100	4,000	105,100
SR215 north of Inland ctr Dr	81,600	91,500	3,610	95,100
SB215 S. of Orange Show off ramp	70,500	80,300	2,920	83,200
SR-215 Sth of Orange Show Rd	88,200	98,500	3,970	102,500



EXISTING CONDITION
YEAR 2003
FIGURE 2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
PROJECT ENGINEER
CALCULATED/ DESIGNED BY
CHECKED BY
DATE REVISED BY
DATE REVISED

DIST | COUNTY | ROUTE | KILOMETER POST TOTAL PROJECT | SHEET NO | TOTAL SHEETS

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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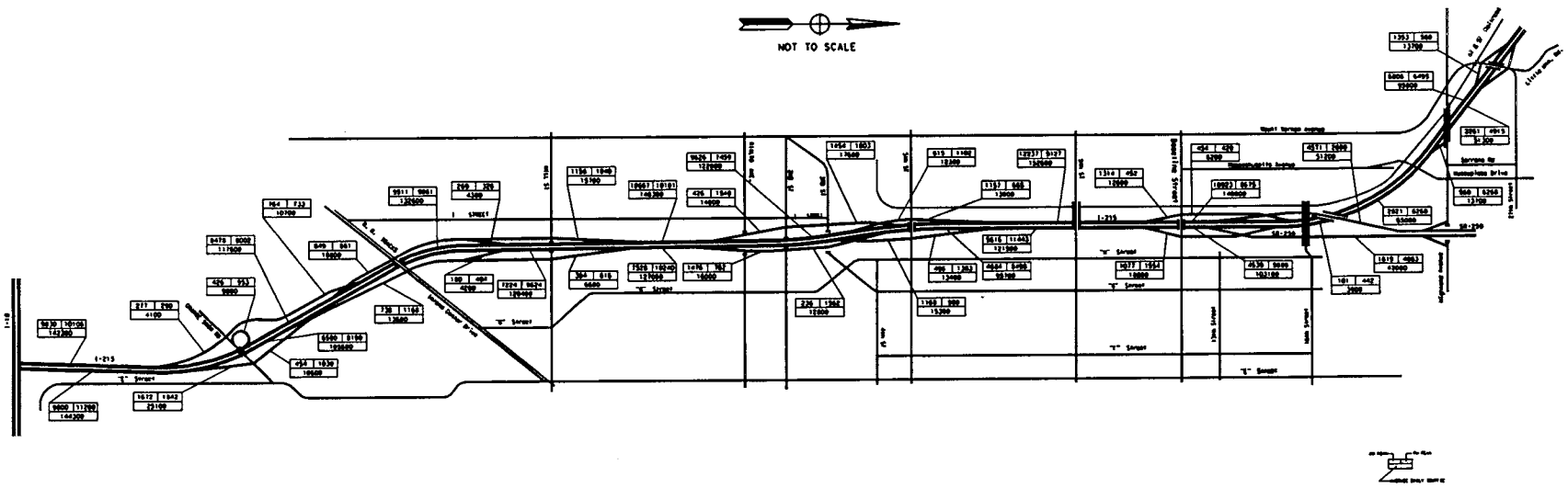
RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => MUSER
DGN FILE => MREQUEST

CU 00000

EA 000000

LAST REVISION DATE PLOTTED => MDATE
00-00-00 TIME PLOTTED => STIME



PROPOSED CHANGES
TRAFFIC VOLUMES
YEAR 2030

FIGURE 3

...\Traffic Volumes 2030r.dgn 7/12/2006 3:09:08 PM

Level Of Service

The various segments of the existing freeway operate between Level of Service (LOS) E and F (PM) for the northbound direction and between LOS D and E (AM) in the southbound direction. All freeway segments will operate at LOS F in the year 2030 no build condition. The preferred alternative calls for the construction of a Braided Ramp/ Split Diamond System to implement the proposed project. The LOS is significantly improved for the build option, which includes one HOV lane and a fourth mixed flow lane in each direction. The existing and projected LOS for the various segments are presented in Tables 6 and 7. In cases where there are two LOS entries, the first one indicates the LOS of the freeway segment without the weaving analysis with auxiliary lanes, and the second LOS is with the weaving analysis with auxiliary lanes. Where two LOS values are shown, it indicates the LOS with and without the weaving analysis. The VA Traffic Study for the proposed design variation showed a few areas along the corridor where there was still LOS F. To mitigate these areas, auxiliary lanes were added to facilitate weaving and bring the LOS up to E. Specific areas addressed were between Mill and Second Street and between 5th and Baseline.

All streets crossing under or over the freeway were modeled with PASSER II-90 using 2030 traffic volumes. The mainline data were based on the East Valley Traffic Model which is consistent with SCAG CTP Subregional Model.

Table 8 presents the results of intersection analysis for the interchanges/ intersections within the project limits. The Project Development Team members selected the PM peak hour for analyzing the LOS for each of the intersections. Generally, the PM peak hour represented the worst-case scenario.

Table 6: Northbound I-215 Mainline LOS

Description	1998		2020 No-Build		2020 Braid Split HOV		2030 Braid Split HOV	
	AM	PM	AM	PM	AM	PM	AM	PM
Northbound								
Between I-10 and Orange Show Rd.	D	E	F	F	D	F	D/D	F/F
I-215 S. of Inland Center Dr	D	E	F	E	C	D	C	D
I-215 N. of Inland Ctr Dr Loop On Ramp	E	E	F	F	*	*	*	*
I-215 Between Inland Center Dr. and Mill	*	*	*	*	D	E	C	E
I-215 Between Mill and 2nd/3rd	*	*	*	*	D	E	C/D	E/E
I-215 N. of Mill St On Ramp	E	F	F	F	*	*	*	*
I-215 N. of 2nd St. On Ramp	D	F	F	F	*	*	*	*
Between 2nd/3rd and 5th	*	*	*	*	C	D	B	D
Between 5th and Baseline	*	*	*	*	D	F/E	C/C	F/E
I-215 N. of 6th St Off Ramp	D	E	E	F	*	*	*	*
I-215 N. of 10th St On Ramp	D	F	E	F	*	*	*	*
I-215 N. of 13th St Off Ramp	C	E	E	F	*	*	*	*
I-215 N. of SR-259	C	E	F	F	C	D	B	D
I-215 N. of Muscupiabe Dr On Ramp	C	E	F	F	*	*	*	*
I-215 N. Of Highland Ave	C	D	F	F	*	*	*	*
At 27th Street	*	*	*	*	B	C	A	C

Table 7: Southbound I-215 Mainline LOS

Description	1998		2020 No-Build		2020 Braid Split HOV		2030 Braid Split HOV	
	AM	PM	AM	PM	AM	PM	AM	PM
Southbound								
I-215 S. of 27th St	D	C	F	F	C	C	D	D
I-215 S. of SR-259	E	D	F	F	E	D	D	C
I-215 S. of 13th St Off Ramp	E	D	F	F	*	*	*	*
I-215 S. of Orange St On Ramp	E	D	F	F	*	*	*	*
Between Baseline and 5th	*	*	*	*	F	D	E/E	D/D
I-215 S. of 6th St Off Ramp	E	D	E	E	*	*	*	*
Between 5th and 2nd/3rd	E	D	E	F	D	C	E	C
Between 2nd/3rd and Mill	*	*	*	*	E	E	F/E	E
I-215 S. of 2nd St On Ramp	E	D	E	F	*	*	*	*
Between Mill and Inland Center Dr	E	E	E	F	E	D	E	D
I-215 S. of Inland Ctr Dr On Ramp	D	D	D	F	*	*	*	*
At Orange Show Rd	*	*	*	*	D	C	D	D
Between Orange Show Rd and I-10	D	E	D	F	E	D	E/E	E/E

Notes: 1. * No data due to proposed or existing conditions
2. Where 2 LOS are shown, they refer to without/with weaving analysis with auxiliary lanes included

Table 8: Intersection Level of Service Analysis

Description	Delay/Vehicle	LOS
Orange Show Road		
SB Ramps	26.7	C
NB Ramps	30.6	C
E Street	45.0	D
Inland Center Drive		
SB Ramps	15.2	B
NB Ramps	19.6	B
Adell	29.3	C
Mill Street		
I Street	21.0	C
SB Ramps	22.6	C
NB Ramps	18.4	B
Crescent	15.5	B
G Street	21.1	B
2nd Street		
I Street	27.8	C
SB Ramps	38.2	D
NB Ramps	23.1	C
G Street	31.6	C
3rd Street		
SB Ramps	27.1	C
NB Ramps	25.5	C
Baseline		
SB Ramps	24.1	C
NB Ramps	26.2	C
H Street	28.8	C
5th Street		
SB Ramps	24.7	C
NB Ramps	26.3	C
H Street	28.3	C
G Street	29.1	C

Interagency Consultation

This project was presented to the Transportation Conformity Working Group (TCWG) of SCAG for Interagency Consultation for PM2.5 on May 23, 2006. The project was reviewed as a project that is not an air quality concern and the determination was made that further information was needed. After further discussion, the project was determined a project of air quality concern. A 30-day public review period will be provided.

VII. Conclusion

Based on the analysis and monitoring data for the I-215 Widening/ Reconstruction Project, it is determined that the I-215 Widening/ Reconstruction Project meets all the project level conformity requirements, and that the I-215 Widening/ Reconstruction project will not cause or contribute to a new violation of the $PM_{2.5}$ NAAQS, or increase the frequency or severity of a violation.

We are presently constructing Route 210 which is parallel to Route 10. Several trucks that use Route 10 and eventually Route 215 will be diverted to Route 210 (which is north of the project). As such trucks will be bypassing this segment of Route 215.

In accordance with projected increases in populations and development, future traffic volumes are anticipated to increase substantially in comparison to today's volumes. Please note that in some sections of the build scenario, the 2030 total ADT is greater than the 125,000 ADT, but the diesel truck traffic remains less than 10,000 (The highest truck ADT for year 2030 for SR 215 north of I-10, is 7810).

The proposed improvements would reduce traffic congestion, improve local access, and improve existing roadway elements to current design standards. The improvement in flow would result in higher travel speeds. Diesel trucks produce fewer $PM_{2.5}$ emissions at higher speeds and the project would be expected to reduce emissions from individual diesel trucks relative to conditions without the project. Funds used in the I-215 Widening/ Reconstruction Project are Congestion Management Air Quality (CMAQ) funds, which are usually given to projects that improve air quality.

Therefore, the project meets the conformity hot-spot requirements in *40 CFR §93.116 and §93.123* for $PM_{2.5}$.

Qualitative PM Hot Spot Analysis

ORA052

QUALITATIVE $PM_{2.5}$ HOT SPOT CONFORMITY DEMONSTRATION SR-241, FOOTHILL TRANSPORTATION CORRIDOR SOUTH JULY 12, 2006

Foothill Transportation Corridor South (FTC-S) (also known as the South Orange County Transportation Infrastructure Improvement Project [SOCTIIP]) is a nonexempt project, which is also not "a project of air quality concern (POAQC)" as specified in the conformity rule (*$PM_{2.5}$ and PM_{10} Hot-Spot Analyses in Project-Level Transportation Conformity Determinations for the New $PM_{2.5}$ and Existing PM_{10} National Ambient Air Quality Standards,* 40 CFR Part 93). However, in the interest of public information, a qualitative $PM_{2.5}$ hot spot assessment is included in the proposed Final EIS that will be circulated for public review.

The following qualitative assessment of the $PM_{2.5}$ hot spot potential of the proposed Foothill Transportation Corridor South toll road addresses the recommended topics specified in the United States Environmental Protection Agency's (EPA) *Transportation Conformity Guidance for Qualitative Hot Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* (EPA420-B-06-902, March 2006).

PROJECT HISTORY

Planning for a transportation corridor in South Orange County that would connect to I-5 began 25 years ago. In 1981, The County Master Plan of Arterial Highways (MPAH) was amended to include several transportation corridors to meet the long-term needs of fast-growing Orange County. While these corridors were initially contemplated to be public parkways, the shortage of federal and State funding for new highway projects led the County to pursue implementation through a toll road funding mechanism. The FTC-S Preferred Alternative represents the last segment of the Orange County toll road system to be implemented.

The most recent environmental documentation for the SOCTIIP was initiated six years ago. The California Environmental Quality Act (CEQA) portion of the process was completed when the Transportation Corridor Agencies (TCA) Board of Directors acted in February 2006 to approve the FTC-S Preferred Alternative and certify the Final Subsequent Environmental Impact Report (SEIR).

The Federal Highway Administration (FHWA) is the federal lead agency for the SOCTIIP Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA). The United States Department of the Navy (DON), Marine Corps Base (MCB) Camp Pendleton is a Cooperating Agency for the EIS under NEPA because the southern segment of the Preferred Alternative transects the western portion of MCB Camp Pendleton. The environmental review effort has included ongoing coordination with other federal agencies, including the United States Fish and Wildlife Service (USFWS), the U.S. Army Corps of Engineers (ACOE), and the U.S. Environmental Protection Agency (EPA).

The SOCTIIP environmental document was prepared in compliance with the requirements of CEQA and NEPA and in a manner consistent with the NEPA/Section 404 Memorandum of Understanding (MOU). The federal agencies participating in this integration process are FHWA, EPA, USFWS, and ACOE. The California Department of Transportation (Caltrans) is an active participant as the local liaison for FHWA. The NEPA/404 MOU agencies, MCB Camp Pendleton, Caltrans, and the TCA are collectively referred to as the "SOCTIIP Collaborative."

The EPA and ACOE have preliminarily determined that the FTC-S Preferred Alternative is the least environmentally damaging practicable alternative (LEDPA). The USFWS has preliminarily indicated that the FTC-S Preferred Alternative will comply with applicable requirements of the Endangered Species Act. These determinations reflect the evaluations by these agencies in the Collaborative process conducted over the last six years.

Transportation Conformity is a component of the proposed Final EIS, which is currently being prepared under the direction of FHWA and Caltrans. Federal conformity requirements for addressing ROG, CO, NO_X and PM_{10} emissions associated with the project were met during interagency consultation with SCAG's Transportation Conformity Working Group on the Draft EIS/SEIR. Most recently, additional interagency consultation occurred for the amendment to SCAG's 2004 Regional Transportation Plan to reflect the Preferred Project scope (October 2005 through January 2006). Following completion of interagency review in January 2006, EPA promulgated a final conformity rule addressing $PM_{2.5}$ emissions. Since the FTC-S project was not fully approved by FHWA prior to April 1, 2006, the project must comply with the new $PM_{2.5}$ conformity rule. This document and associated interagency and public consultation address the $PM_{2.5}$ conformity rule requirements.

A figure identifying the alignment of the SOCTIIP Preferred Alternative is provided at the end of this document.

COMPLIANCE WITH CFR 93.116 AND 93.123

Section 93.116 (a) of 40 CFR states that an FHWA/Federal Transit Authority (FTA) project must not cause or contribute to any new localized $PM_{2.5}$ violations or increase the frequency or severity of any existing PM_{10} or $PM_{2.5}$ violations in nonattainment or maintenance areas. The regulations further state that projects may satisfy this requirement without an analysis of their potential to create $PM_{2.5}$ hot spots, provided they do not meet the criteria set forth in Section 93.123 (b) for "projects of air quality concern."

A project may be considered to have one of three types of status:

1. Exempt
2. Not be exempt but not be a POAQC based on the specific parameters established in the regulations
3. It may be a POAQC, which requires that a qualitative hot-spot analysis be conducted

The FTC-S Preferred Alternative does not meet the definition of an exempt project under Section 93.123(b). The FTC-S Preferred Alternative also does not fall within the five types of projects considered to be POAQC that require a hot-spot analysis (see below). As a nonexempt project that is

not a POAQC, the Preferred Alternative thus does not require a $PM_{2.5}$ hot-spot analysis as part of its conformity determination.

The five types of projects considered to be POAQC are:

1. New or expanded highway projects that have a significant number of or significant increase in diesel vehicles
2. Projects affecting intersections that are at, or will change to, Level of Service (LOS) D, E, or F because of increased traffic volumes related to the project from a significant number of diesel vehicles
3. New bus and rail terminals, and transfer points, that have a significant number of diesel vehicles congregating at a single location
4. Expanded bus and rail terminals and expanded transfer points, which significantly increase the number of diesel vehicles congregating at a single location
5. Projects in or affecting locations, areas, or categories of sites which are identified in the PM_{10} or $PM_{2.5}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation

In particular, the FTC-S Preferred Alternative does not fall within the category of "new or expanded highway projects that have a significant number of or significant increase in diesel vehicles." The March 2006 conformity rule and EPA guidance indicate that a new transportation facility with 8 percent or more diesel truck traffic, or more than 10,000 average daily truck trips, would warrant a $PM_{2.5}$ hot-spot analysis. In contrast, the FTC-S Preferred Alternative's diesel truck traffic component is estimated to be less than 4 percent for all years through 2025. This estimate is based on actual data for the existing toll roads in Orange County, including State Route 73 (SR-73), which connects Interstate 5 (I-5), Interstate 405 (I-405), State Route 261 (SR-261), and the existing portion of State Route 241 (SR-241).

The highest projected traffic volume segment on the FTC-S is just south of Oso Parkway, with 58,000 average daily trips (ADT) in 2025. At 4 percent trucks, the highest level of trucks on any segment of the facility would be 2,320 ADT, not all of which are diesel-fueled. This level of truck traffic is more than 75 percent below the 10,000 ADT indicator discussed in the EPA conformity guidance. Further, the FTC-S Preferred Alternative does not impact any intersection with LOS D, E, or F, which is another indicator of the need for a qualitative $PM_{2.5}$ hot-spot analysis.

Also, the FTC-S Preferred Alternative is not a bus, rail, truck, or intermodal transfer station, nor has it been identified in an applicable implementation plan as a site of violation or possible violation. The Guidance provides examples or projects that are not of air quality concern, including new or expanded highway projects that primarily serve gasoline vehicle traffic, which is an appropriate description of the proposed project.

Although the project is not a POAQC pursuant to 40 CFR 93.116, the proposed Final EIS provides information that establishes qualitatively that no $PM_{2.5}$ hot spots are likely under the FTC-S Preferred Alternative.

> "Future new or worsened $PM_{2.5}$ violations of any standard are not anticipated as a result of the Preferred Alternative for several reasons. First, the proposed project has been on regional transportation plans for 25 years and is reflected in the AQMD air quality modeling efforts for the region. Therefore, emissions from the project are reflected in the air quality modeling for the SCAG RTP, which is a conforming plan. Second, the project does not qualify as a project of air quality concern as defined by the new $PM_{2.5}$ Hot Spot Rule because the percentage of the total truck traffic that is anticipated to be diesel trucks is less than 4 percent compared with the 8 percent diesel truck traffic component indicated in the Final Rule. Third, the existing ambient concentrations of $PM_{2.5}$ are well below the established thresholds. Therefore, it is very unlikely that the project's contributions would create a new, or worsen an existing, $PM_{2.5}$ violation."[1]

While the FTC-S Preferred Alternative will result in a very small increase in regional VMT (i.e., 14,981 vehicle miles per day in comparison to the 421,712,541 miles projected for the region), arterial road traffic will decrease substantially more (i.e., 386,398 miles per day). With implementation of the proposed project, traffic congestion will be reduced at arterial road intersections, where congestion could lead to $PM_{2.5}$ hot spots.

QUALITATIVE HOT-SPOT ANALYSES

The EPA's *Transportation Conformity Guidance for Qualitative Hot Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* provides a list of what should be documented for a qualitative $PM_{2.5}$ or PM_{10} hot-spot analysis. Generally, the purpose of the hot-spot analysis is to document how the proposed project meets the requirements in 40 CFR 93.116 and 92.123. As described above, a qualitative analysis of the SOCTIIP Preferred Alternative is not required because the project is not a POAQC. However, a qualitative analysis was performed for information purposes and is summarized below in accordance with the EPA's Guidance.

1. Description of the Proposed Project

The Preferred Alternative is the portion of the toll road system that would extend south to connect with I-5 near the San Diego County border; it has been and is still known as the FTC-S project. It is the last segment of the toll road system to be completed and will extend the existing SR-241 (also known as FTC-N) in a southerly direction. The existing SR-241 was designed and constructed by TCA and is owned and maintained by Caltrans.

The FTC-S Preferred Alternative (A7C-FEC-M Alternative) consists of six mixed-flow toll lanes, three lanes in each direction, from Oso Parkway to the Cristianitos interchange, where the facility will be reduced to two lanes in each direction as it reaches its connection with I-5. This configuration provides one fewer lane in each direction than the original project design (CP Alignment). A total of 11 miles of the 15.9-mile project fall within the Southern California Association of Governments (SCAG) Metropolitan Planning Organization (MPO) boundaries, with the remaining 5-mile segment within the San Diego Association of Governments (SANDAG) MPO boundaries. (The portion of the

[1] Source: Proposed Final EIS, Section 4.7.1

project located within the SANDAG MPO is on federal land, specifically MCB Camp Pendleton.) The scope of the proposed project is listed and modeled in SCAG's 2004 Regional Transportation Plan (RTP) and 2004 Regional Transportation Improvement Program (RTIP).

2. Description of the Hot-Spot Analysis Methodology

Analysis Method. The qualitative hot-spot analysis was conducted using the existing $PM_{2.5}$ concentrations monitored at the nearby Mission Viejo Air Quality Monitoring Station.

Data Considered. EPA issued a final rule for $PM_{2.5}$ and PM_{10} hot-spot analyses in project-level transportation conformity determinations for the new $PM_{2.5}$ and existing PM_{10} national ambient air quality standards (NAAQS) on March 10, 2006 (71 Fed. Reg. 12468) ("Final Rule"). The Final Rule became effective on April 5, 2006, and requires a qualitative $PM_{2.5}$ hot-spot anlysis to be completed for project-level conformity determinations for projects of air quality concern completed in $PM_{2.5}$ nonattainment areas. EPA is not requiring quantitative analyses of these projects at this time since quantitative hot-spot modeling techniques and associated EPA modeling guidance still do not exist (71 Fed. Reg. 12471). Only projects that are PAOQC are required to complete qualitative $PM_{2.5}$ hot-spot analyses. As described above, the FTC-S Preferred Alternatve is not a POAQC; however, a qualitative anaysis was performed for information purposes.

An example of a project that would be considered to be of air quality concern is a highway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT), and 8 percent or more of such AADT being diesel truck traffic (71 Fed. Reg. 12491). FTC-S does not meet any of the definitions of projects that are considered to be of air quality concern. FTC-S is projected to serve approximately 54,000 ADT. Also, it is projected that truck traffic on the SR-241 extension will be less than 4 percent of the total vehicular traffic. (The existing fleet mix on the toll roads in Orange County ranges from less than 1 percent truck traffic to 3.6 percent trucks.) EPA specifically indicated that new highways that primarily service gasoline vehicle traffic, including such projects involving congested intersections operating at LOS D, E, or F, do not meet the criteria for a POAQC (71 Fed. Reg. 12491). FTC-S is expected to primarily serve gasoline vehicle traffic and not diesel truck traffic. Furthermore, FTC-S is not a designated truck route, and the project does not include intermodal or bus terminals. Therefore, the Proposed Project is not a POAQC.

Although the proposed project is not a POAQC, a qualitative analysis was conducted for the project. The qualitative analysis was prepared in accordance with EPA's *Transportation Conformity Guidance for Qualitative Hot-spot Analysis in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* that was issued on March 29, 2006. The qualitative analysis reflects the monitored concentrations of $PM_{2.5}$ in the vicinity of the FTC-S. The monitored $PM_{2.5}$ concentrations at the Mission Viejo Station (the nearest station to the proposed project) shown in Table A indicate that the federal 24-hour $PM_{2.5}$ standard ($65\mu g/m^3$) and the federal annual standard ($15\mu g/m^3$) were not exceeded within the past three years. The average of the 98th percentile 24-hour concentrations is 36 $\mu g/m^3$ well below the federal threshold of $65\mu g/m^3$. In addition, the average of the past three years' annual average concentrations is 11.9 $\mu g/m^3$, also below the federal standard of 15 $\mu g/m^3$.

Table A: $PM_{2.5}$ Measurements ($\mu g/m^3$) at the Mission Viejo AQ Station

Year	24-Hour Measurements					Annual Average
	1st High	2nd High	3rd High	4th High	98th Percentile	
2003	50.6	43.5	37.6	31.5	38	13.1
2004	49.4	45.8	38.5	32.3	39	12.0
2005	35.3	34.5	31.4	21.6	31	10.6
Average					36	11.9
Threshold ($\mu g/m^3$)					65	15
Percentage of Threshold					55%	79%
No. Days Above National 24-Hour Standard	0	0	0	0		
Federal Annual Average Exceeded?						No

Source: ARB Web: http://www.arb.ca.gov/adam/welcome.html, April 2006.

An alignment similar to the alignment of the A7C-FEC-M Alternative is included in the modeling for the Air Quality Management Plan (AQMP). As defined in the AQMP modeling, FTC-S is described as an extension of SR-241 from Oso Parkway to I-5. Therefore, the SOCTIIP Alternative, A7C-FEC-M, which proposes an extension for SR-241 from Oso Parkway to I-5 in San Diego County, is consistent with the RTP and the AQMP modeling.

Future new or worsened $PM_{2.5}$ violations of any standard are not anticipated for several reasons. First, the proposed project has been on regional transportation plans for 25 years and is reflected in the Air Quality Management District (AQMD) air quality modeling efforts for the region. Second, the project does not qualify as a project of air quality concern as defined by the new $PM_{2.5}$ hot spot rule. Third, the existing ambient concentrations of $PM_{2.5}$ are very low and well below the established thresholds. Therefore, it is very unlikely that the project's contributions would create a new or worsen an existing $PM_{2.5}$ violation.

Conclusion. For the reasons described above, and given the very low existing average concentrations of $PM_{2.5}$ near the proposed project, future new or worsened $PM_{2.5}$ violations of any standard are not anticipated, and, therefore, the project meets the conformity hot-spot requirements in 40 CFR §§ 93.166 and 93.123 for $PM_{2.5}$.

3. Description of the Type of $PM_{2.5}$ Emissions Considered in the Qualitative Analysis

The hot-spot analysis is based on directly emitted $PM_{2.5}$ attributable to an individual transportation project, since secondary particles formed through $PM_{2.5}$ precursors take several hours to form in the atmosphere, giving emissions time to disperse beyond the immediate area of concern for localized analysis.

4. Description of Existing Conditions

The study area for the FTC-S Preferred Alternative encompasses the southeast part of Orange County and the northernmost part of San Diego County, and 10 cities bordering or in the vicinity of I-5 between its confluence with I-405 in central Orange County and its intersection with Basilone Road in San Diego County. The total number of residents in south Orange County in 2000 was 481,900; this is forecast to increase to 627,568 residents in 2025. The total number of employees in south Orange County is forecast to increase from 207,193 employees in 2000 to 304,938 employees in 2025. There are numerous existing deficiencies at freeway segments, freeway ramps, and arterial intersections as listed in Section 1.4.1 of the Final SEIR/Proposed Final EIS.

The background levels of $PM_{2.5}$ in the study area do not exceed the federal AAQS. Specifically, $PM_{2.5}$ concentrations at the Mission Viejo Station have not exceeded the federal 24-hour standard within the past five years. The annual average concentrations exceeded the State standard in three of the past five years and exceeded the federal standard in 2001 and 2002, but not since then.

The EPA has designated the South Coast Air Basin (SCAB) as nonattainment for $PM_{2.5}$ and San Diego as attainment for $PM_{2.5}$.

5. Description of the Changes that will Result in the Future from the Project

As stated in the adopted purpose and need statement, transportation infrastructure improvements are necessary to address needs for mobility, access, goods movement, and projected freeway capacity deficiencies and arterial congestion in south Orange County. Freeway capacity deficiencies and arterial congestion are anticipated as a result of projected traffic demand, which would be generated by projected increases in population, employment, housing, and intra- and inter-regional travel estimated by SCAG and SANDAG. The purpose of the FTC-S Preferred Alternative is to provide improvements that would help alleviate future traffic congestion and accommodate the need for mobility, access, goods movement, and future traffic demands on I-5 and the arterial network in the study area. The project would improve the projected future LOS and reduce the amount of congestion and delay on the freeway system and, as a secondary objective, the arterial network, in southern Orange County.

Traffic and emissions modeling for the FTC-S Preferred Alternative demonstrates congestion relief and associated emission reductions within the region and the South Orange County study area. While the FTC-S Preferred Alternative will result in a very small increase in regional VMT (i.e., 14,981 vehicle miles per day in comparison to the 421,712,541 miles projected for the region), arterial road traffic will decrease substantially more (i.e., 386,398 miles per day). Traffic will be removed from arterial road intersections where congestion could otherwise contribute to $PM_{2.5}$ hot spots.

6. Description of the Analysis Years Examined

The emissions for the proposed project were examined for opening day (2008), 2018, and 2025. The project would result in less than 4 percent truck traffic, which means that there would be 2,320 trucks/day on the heaviest segment in 2025.

7. Description of Mitigation Measures and Their Expected Effects

The conformity regulation requires written commitment from the project sponsor for the final plans, specifications, and estimates to include control measures to limit $PM_{2.5}$ emissions from the construction activities and/or normal use and operation associated with the project identified in the applicable State Implementation Plan (SIP). Although the air quality study does not identify a potential $PM_{2.5}$ violation or increase in severity from the project at completion, the mitigation measures below have been identified as an extra margin of insurance that no exceedances will occur.

The SOCTIIP certified Final SEIR and proposed Final EIS spells out the Foothill/Eastern Transportation Corridor Agency's commitment to providing mitigation measures to control $PM_{2.5}$ emissions (Proposed Final EIS, Section 4.7.4). These include two measures from Appendix IV-C of the South Coast Air Quality Management District (SCAQMD) that are applicable to the FTC-S Preferred Alternative.

The AQMP includes two measures that are applicable to the SOCTIIP build Alternatives. Measures AQ-6 and AQ-7 below are included to insure consistency with the measures contained in the AQMP. These measures are directly from Appendix IV of the AQMP.[1]

> "The following PM_{10} and $PM_{2.5}$ mitigation measures apply to the Preferred Alternative:
>
> Particulate Emission (PM_{10}) Control
>
> Measure AQ-1. During construction, contractor specifications shall incorporate directions to contractors to control fugitive dust. Fugitive dust shall be controlled by regular watering, paving construction roads, or other dust preventive measures, as defined in SCQAMD Rule 403.
>
> After clearing, grading, earth moving or excavation the following activities will be performed by the construction contractor:
>
> a. Seeding and watering will be performed until viable vegetation cover is in place in inactive areas.
>
> b. Soil binders will be spread.
>
> c. Areas will be wet down sufficiently to form a crust on the surface. Repeated soakings will be performed as necessary to maintain this crust.
>
> d. Reduce speeds to 10 to 15 mph in construction zones on unpaved areas.
>
> Measure AQ-2. During construction, measures contained in Tables 1 and 2 of SCAQMD Rule 403 will be implemented by the construction contractor. Control of particulate emissions from construction activities is best controlled through the requirements contained in SCAQMD's Rule 403, Tables 1 and 2. Tables 1 and 2 are reproduced here as Tables 4.7-60 and 4.7-61. The measures

[1] Source: Proposed Final EIS, Sections 4.7.4.2 through 4.7.4.3

contained in these tables are presented as an option to air quality monitoring in Rule 403. Table 4.7-60 contains measures such as maintaining an adequate moisture content in the soil, watering grading areas, establishing ground cover in inactive areas and watering unpaved roads. Table 4.7-61 identifies additional measures that are applied during high wind conditions. The mitigation measure, therefore, is to require that the measures contained in Tables 1 and 2 of Rule 403 be utilized. This potentially results in a much higher reduction of particulate emissions than if the air monitoring option contained in Rule 403 was employed. The air monitoring option requires monitoring around the project site, and as long as pollutant levels do not exceed threshold limits, no pollutant emission reduction measures are employed. The measure would be triggered prior to the initiation of grading.

Measure AQ-3. During construction, the contractor shall be responsible for sweeping all public streets adjacent to the project site once a day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water). This condition would apply to those areas where construction traffic leaves the project site and travels onto public roadways.

Measure AQ-4. During construction, the contractor shall be responsible for installing wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site each trip.

Construction Equipment Emission Control

Emissions generated by construction equipment will exceed SCAQMD thresholds. The generation of these emissions is almost entirely due to engine combustion in construction equipment and employee commuting. The measures below address these emissions.

Measure AQ-5. During final design, contractor specifications shall require that contractors implement the following measures:

- Use low emission mobile construction equipment.
- Maintain construction equipment engines by keeping them tuned.
- Use low sulfur fuel for stationary construction equipment. This is required by SCAQMD Rules 431.1 and 431.2.
- Utilize existing power sources (i.e., power poles) when feasible. This measure would minimize the use of higher polluting gas or diesel generators.
- Configure construction parking to minimize traffic interference.
- Minimize obstruction of through-traffic lanes. When feasible, construction should be planned so that lane closures on existing streets are kept to a minimum.

- Schedule construction operations affecting traffic for off-peak hours.
- Develop a traffic plan to minimize traffic flow interference from construction activities (the plan may include advance public notice of routing, use of public transportation and satellite parking areas with a shuttle service).
- Include in construction grading plans a statement that work crews shut off equipment when not in use.
- Support and encourage ridesharing and transit incentives for the construction crew.

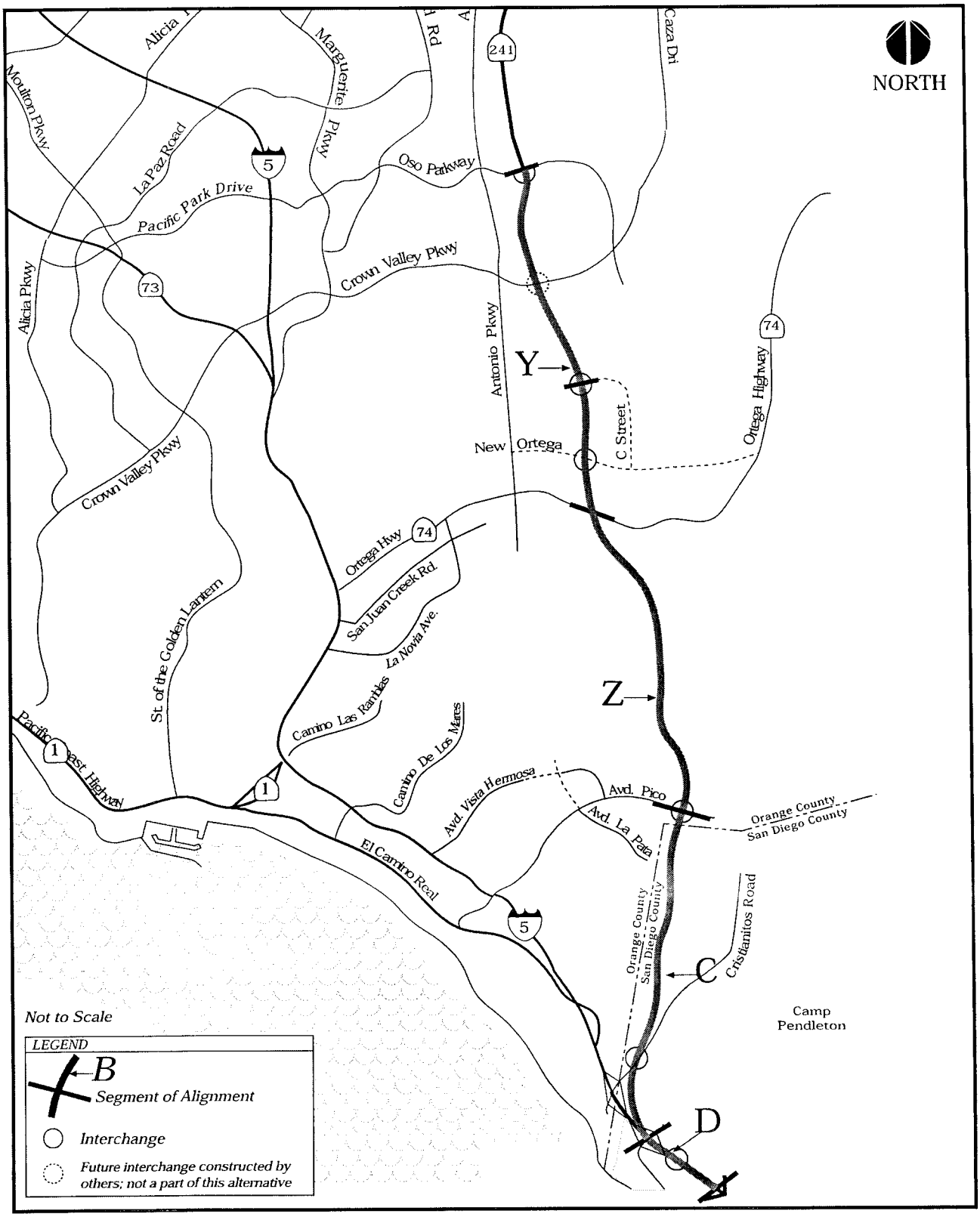
Measure AQ-6. During construction, any material deposited onto paved roads due to a major storm event must be removed within 72 hours of the event by the contractor. Additional time is allowed for mudslides or similar events that block traffic over the material. In the event of road closures due to mudslides or other overwhelming accumulations of material, public access should be restricted until all the material is removed.

Measure AQ-7. During construction, the contractor shall be responsible for implementing a control measure which specifies three "preventive" and one "mitigative" control option(s) that would be mandatory of all unpaved road connections with paved public roads. The four mandatory control options include:

- Paving the last 100 feet from an unpaved roadway connection with a paved road;
- Chemical stabilization of the last 100 feet from an unpaved roadway connection with a paved road at sufficient frequency and concentration to maintain a stabilized surface at all times.
- Installation of dirt removal devices (e.g., tire cleaning device, grizzlies, etc.);
- Cleaning of public paved road surface at any time visible track-out occurs."

8. Conclusion

Future new or worsened $PM_{2.5}$ violations of any standard are not anticipated as a result of the Preferred Alternative for several reasons. First, the proposed project has been on regional transportation plans for 25 years and is reflected in the AQMD air quality modeling efforts for the region. Therefore, emissions from the project are reflected in the air quality modeling for the SCAG RTP, which is a conforming plan. Second, the project does not qualify as a project of air quality concern as defined by the new $PM_{2.5}$ Hot Spot Rule because the percentage of the total truck traffic that is anticipated to be diesel trucks is less than 4 percent compared with the 8 percent diesel truck traffic component indicated in the Final Rule. Third, the existing ambient concentrations of $PM_{2.5}$ are well below the established thresholds. Therefore, it is very unlikely that the project's contributions would create a new, or worsen an existing, $PM_{2.5}$ violation.



Source: P&D Consultants (2001).

Alignment of the Alignment 7 Corridor - Far East Crossover - Modified Alternatives

SOCTIIP EIS/SEIR	Figure 2.4-12

TCWG July 25, 2006

PM Hot Spot Requirement Review

RTIP ID# 45661

Project Description *(clearly describe project)*
Replace the existing three lane Green River Drive Over Crossing (OC) Bridge (Br. No. 56-0633) at the State Route 91(SR-910/ Green River Road Interchange with a new six-lane bridge (Br. No. 56-0819). Additional project improvements includes widening and realignment of interchange ramps, realignment of Green River Road and Fresno Road, construction of retaining walls, installation of traffic signals at the ramp terminals. Utility relocation will be required in this project.

Type of Project *(use Table 1 on instruction sheet)*

Reconfigure existing interchange

County	**Narrative Location/Route & Postmiles**
Riverside County	Riv-91 PM R0.6/R1.2 (KP R1.0/R2.0) **Caltrans Projects – EA#** 456610

Lead Agency: Caltrans

Contact Person	**Phone#**	**Fax#**	**Email**
Tony Louka	(909) 383-6385	(909) 383-6494	Tony _louka@dot.ca.gov

Hot Spot Pollutant of Concern *(check one or both) PM2.5* **X** **PM10**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

	Categorical Exclusion (NEPA)	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**
X					

Scheduled Date of Federal Action:

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	7/1/03			9/1/06
End	7/1/04		12/15/05	9/1/08

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

Traffic studies have shown that the level of service (LOS) provided by he SR-91/Green River Road IC is now at level "F", creating long back-ups on Green River Road from the IC to Dominguez Ranch Road and beyond. This portion of Green River Road Interchange provides access to the freeway for the residents of Sierra Del Ore, the Green River Village mobile Home Park, and neighboring developments east of the freeway.

The area of west Riverside County/ City of Corona has grown rapidly over the last few years, and its growth is expected to continue. The SR-91/Green River Road IC needs to be improved in order to reach an acceptable level of service to handle future growth and traffic volumes.

Current peak hour's traffic at the IC is high and operating conditions should be improved. Although the intersection is located in an unincorporated area of the county, most traffic is generated with the City of Corona . The existing traffic exceeds the capacity of the westbound entrance ramp and the two-lane and four-lane Green River Road Segments leading to the Interchange

Traffic conditions at the Green River Road IC only improve if improvements to the mainline freeway take place. The SR-91/Green River IC should be improved in order to alleviate present traffic volumes and planned growth.

The heavy traffic flow on Green River Road during morning peak hours had adversely impacted the Green River Village Mobile home Park with noise pollution and traffic conditions. In addition , the heavy traffic prevented vehicles in the mobile park from entering the Green River Road, thereby creating backups in the mobile home park. As a result, on June 8, 1998 , Caltrans Barricaded the west bound entrance ramp at Coal Canyon Road, which is located 5,000 feet westerly of the SR-91/ Green River Road IC to help reduce heavy traffic flow through Green River Road

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The surrounding land use is mostly residential around the proposed project location. The Green River Road provides access to wildlife and scenic areas within project vicinity

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The 2004 Average daily Traffic (ADT) on Green is 18,700, and truck traffic is 2% . The LOS is F. The proposed construction will last for two years and expected to be completed by September 1, 2008

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The 2025 build out ADT,s for Green River is 60,500 with the same 2% truck traffic

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

The project report provides the traffic data for year 2002 (EXSITING) for Mainline(SR-91) as
ADT 252,400 , DHV 17,600, LOS "F"
% Trucks in Design Hour 4.0%

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

The project report provides the traffic data for year 2025 (forecasted for Mainline(SR-91) as
ADT 454,000, DHV 30,800 LOS "F"
% Trucks in Design Hour 4.0%

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

The area of west Riverside County/ City of Corona has grown rapidly over the last few years, and its growth is expected to continue. The SR-91/Green River Road IC needs to be improved in order to reach an acceptable level of service to handle future growth and traffic volumes. The congestion relief will create redistribution and recirculation of traffic on Coal Canyon Road westbound entrance-ramp , which is currently barricaded.

Comments/Explanation/Details *(attach additional sheets as necessary)*

The project is a PCE/CE and is ready to go in construction in September 2006 per schedule

RTIP ID# *(required)* RIV020907

Project Description *(clearly describe project)*

At I-15/Magnolia Avenue, Interchange Improvements: (El Sobrante to Access Control line) E/O Proposed NB off ramp – Reconstruct NB On Ramp, Realign NB Exit Ramp, Signal Installation/Modifications, Widen Structures. (See attached project location map for proposed improvements).

Type of Project *(use Table 1 on instruction sheet)*
RECONFIGURE EXISTING INTERCHANGE

County	**Narrative Location/Route & Postmiles:** The project includes the interchange of Magnolia Avenue with Interstate Route 15, PM 40.0 to 40.7 (Kilo Post 64.4 to 65.5) **Caltrans Projects – EA#** 08-452201
RIV	

Lead Agency: City of Corona

Contact Person	**Phone#**	**Fax#**	**Email**
Khalid Bazmi	951-739-4823	951-736-2496	khalidb@ci.corona.ca.us

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 X PM10**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

X	**Categorical Exclusion (NEPA)**		**EA or Draft EIS**		**FONSI or Final EIS**	X	**PS&E or Construction**		**Other**

Scheduled Date of Federal Action:

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	01/2002	01/2003	01/2004	11/2006
End	01/2003	10/2006	06/2006	7/2008

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*
(excerpted from the August 2003, Project Report)

Due to increased queuing on Magnolia Avenue (eastbound and westbound) and the I-15 ramps (southbound and northbound), the City of Corona and Caltrans initiated this project to relieve existing congestion and improve the overall operation of the interchange.

Current peak hour traffic volumes at the interchange are high, ranging from 1230 vph to 1310 vph on eastbound Magnolia Avenue and from 1030 vph to 1270 vph on the northbound entrance ramp, and operating conditions are unsatisfactory. The 2001 peak hour turning movement volumes at the Magnolia Avenue Interchange on I-15 are shown in the attachments. Making improvements at this time ensures that the facility will be able to adequately handle the increasing flow of traffic while maintaining an acceptable level of service. The projected 2025 traffic data indicates that Magnolia Avenue at the northbound ramps will be operating at a Level of Service "F" without any improvements. Construction of Alternative 3, the northbound loop, will increase the Level of Service to "B" in year 2025.

A review of the existing and projected 2025 traffic demand at this interchange reveals that the existing facilities will not accommodate the traffic flow and movement. Making the proposed improvements at this time ensure that the proposed facility will be able to handle the increased flow of traffic while maintaining an acceptable Level of Service.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

Commercial and Industrial land-use west of the interchange, and Retail and Residential uses East of the interchange.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

I-15 Freeway	**I-15 Freeway**
2008 Build Condition	**2008 No Build Condition**
AADT: 188,200	AADT: 188,200
Trucks: 5.6%	Trucks: 5.6%
Truck AADT: 10,600	Truck AADT: 10,600

Magnolia Ave WEST of I-15	**Magnolia Ave WEST of I-15**
2008 Build Condition	**2008 No Build Condition**
AADT: 38,800	AADT: 38,800
Trucks: 2.0%	Trucks: 2.0%
Truck AADT: 800	Truck AADT: 800

Magnolia Ave EAST of I-15	**Magnolia Ave EAST of I-15**
2008 Build Condition	**2008 No Build Condition**
AADT: 40,000	AADT: 40,000
Trucks: 5.0%	Trucks: 5.0%
Truck AADT: 2,000	Truck AADT: 2,000

(Note: Build and "no build" conditions have the same projected AADT volumes, because the proposed project does not divert any traffic to or from the interchange, rather, it provides improved access and queuing distance for traffic entering the freeway. Per the attached information, the delays and Intersection LOS for the "build" condition (Alternative #3) versus "no-build" condition will improve three affected intersections along Magnolia Avenue from "F/F/E" to "B/F/B" for year 2025. The Project does not increase the truck volumes)

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

I-15 Freeway	**I-15 Freeway**
2025 Build Condition	2025 No Build Condition
AADT: 231,400	AADT: 231,400
Trucks: 5.6%	Trucks: 5.6%
Truck AADT: 13,000	Truck AADT: 13,000

Magnolia Ave WEST of I-15	**Magnolia Ave WEST of I-15**
2025 Build Condition	2025 No Build Condition
AADT: 51,600	AADT: 51,600
Trucks: 2.0%	Trucks: 2.0%
Truck AADT: 1,000	Truck AADT: 1,000

Magnolia Ave EAST of I-15	**Magnolia Ave EAST of I-15**
2025 Build Condition	2025 No Build Condition
AADT: 53,700	AADT: 53,700
Trucks: 5.0%	Trucks: 5.0%
Truck AADT: 2,700	Truck AADT: 2,700

(Note: Build and "no build" conditions have the same projected AADT volumes, because the proposed project does not divert any traffic to or from the interchange, rather, it provides improved access and queuing distance for traffic entering the freeway. Per the attached information, the delays and Intersection LOS for the "build" condition (Alternative #3) versus "no-build" condition will improve three affected intersections along Magnolia Avenue from "F/F/E" to "B/F/B" for year 2025. The Project does not increase the truck volumes)

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

(see above)

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

(see above)

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

The existing traffic conditions at the project location are highly congested; it is possible that some traffic is currently being redistributed. The proposed improvements will reduce queue lengths and congestion at the ramp/local street intersections and will improve traffic flow along Magnolia Avenue.

The nearest interchange to the south at I-15/Ontario Avenue is 1.5 miles away. It was not analyzed as part of the traffic study for the subject project due to the distance from the subject project. The nearest local interchange to the north is at I-15/Hidden Valley parkway. It is approximately 2.5 miles north of the project hence it was not addressed in the traffic study due to the distance from the subject project.

Comments/Explanation/Details *(attach additional sheets as necessary)*

The proposed project will provide operational improvements at the interchange by replacing the EB Magnolia Avenue to NB I-15 on-ramp "left turn" movement, with a "right turn" loop on-ramp.

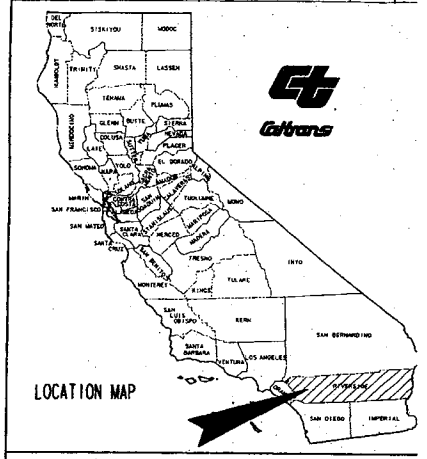
The Project Report and Environmental Document for this project were approved in 2003, and the final design was completed in 2006. The PS&E has been sent to Caltrans' Sacramento office for preparation of the final Bid set and advertising the project. Due to scheduling issues, the some of the Federal Funding for this project was "de-obligated" by FHWA, hence the project is now in the process of being re-certified so that funds can be re-obligated. Due to this delay, we believe that this project must now be reviewed by the TCWG with regard to PM2.5. It is believed that this project is **Not a POAQC**, since it is an operational improvement and does not result in any increase in Truck volumes.

INDEX OF SHEETS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

GEOMETRIC APPROVAL DRAWINGS ON
STATE HIGHWAY
IN RIVERSIDE COUNTY
IN CORONA
AT THE MAGNOLIA AVENUE INTERCHANGE

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	RIV	15	64.7/65.3	1	6



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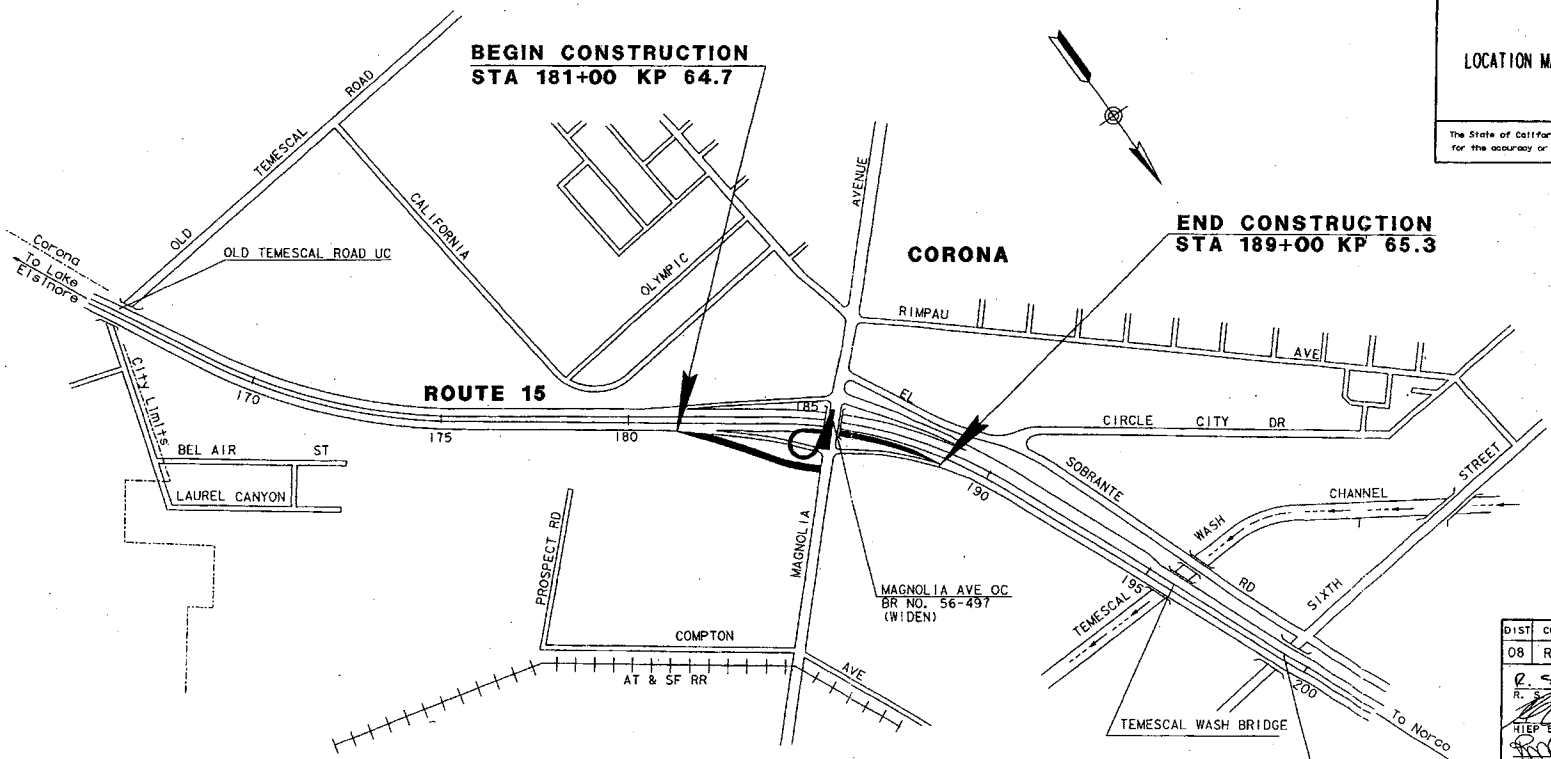


NO SCALE.

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
08	RIV	15	64.7/65.3	1	6

R. S. CRAVER, RECOMMENDED — DATE 6-24-2002

HIEP SUU, APPROVAL — DATE 7/30/2002

REBECCA MOMBY, CONCURRED — DATE

CITY OF CORONA
815 WEST SIXTH STREET
CORONA, CA 91720

SC ENGINEERING
14318 CALIFORNIA AVE SUITE 104
VICTORVILLE, CA 92392

EA 452200

PROJECT ENGINEER | DATE | PROJECT MANAGER | DATE

FOR REDUCED PLANS ORIGINAL 0 20 40 60 80

USERNAME => SC ENGINEERING

049

Table 1

ADT for the Project Study Area For Year 2025

ALL Vehicles						TRUCKS *		
Roadway Segment			Length	Year 2025		Truck %	Year 2025	
Roadway	from	To	Miles	No Build	Build	*	No Build	Build
I-15	South project limit (PM 40.0)	North Project limit (40.7)	0.7	231,400	231,400	5.6%	13,000	13,000
Magnolia Ave	West of I-15			51,600	51,600	2.0%	1,000	1,000
Magnolia Ave	East of I-15			53,700	53,700	5.0%	2,700	2,700

(Source for Traffic Volumes: City of Corona Traffic Model by Meyer Mohaddas & Associates and Caltrans Traffic Data)

Notes:

1. year 2025 is the "build out" year for hte City of Corona Traffic Model that was used for traffic volumes.
2. Truck percentaage on I-15 Freeway is based upon Caltrans Traffic Counts at PM 41.5
3. Truck percentage on Magnolia is based upon City of Corona Traffic counts
4. "No build" and "build" traffic volumes are the same. The Project Report completed in 2003 did not show a difference in the volumes for these two conditions.

Table 2

ADT for the Project Study Area For Year 2008 (Estimated year open to traffic)

ALL Vehicles						TRUCKS *		
Roadway Segment			Length	Year 2008		Truck %	Year 2008	
Roadway	from	To	Miles	No Build	Build	*	No Build	Build
I-15	South project limit (PM 40.0)	North Project limit (40.7)	0.7	188,200	188,200	5.6%	10,600	10,600
Magnolia Ave	West of I-15			38,800	38,800	2.0%	800	800
Magnolia Ave	East of I-15			40,000	40,000	5.0%	2,000	2,000

(Source for Traffic Volumes: City of Corona Traffic Model by Meyer Mohaddas & Associates and Caltrans Traffic Data)

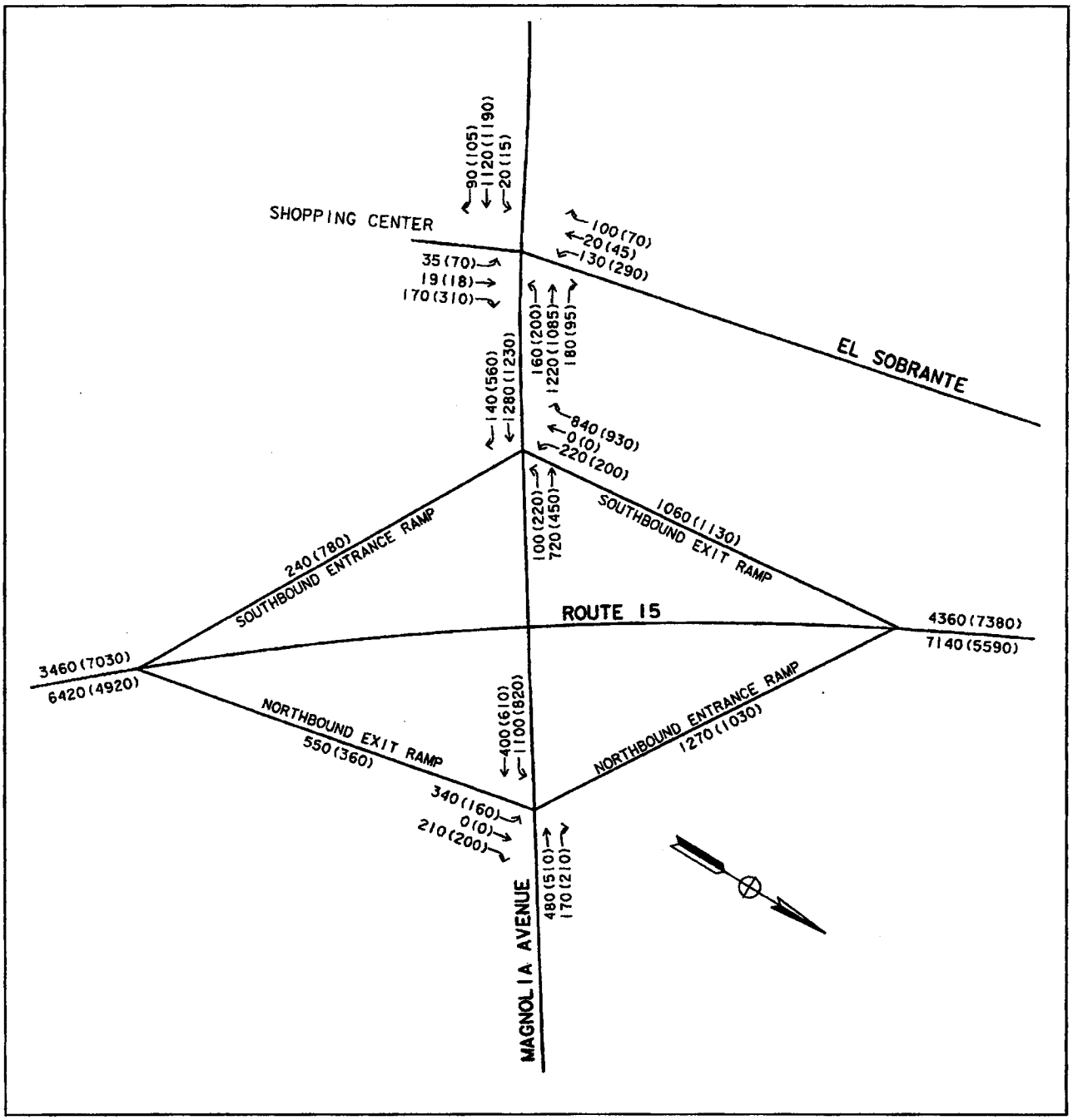
Notes:

1. year 2008 is the anticipated "open to traffic' Year.
2. Truck percentaage on I-15 Freeway is based upon Caltrans Traffic Counts at PM 41.5
3. Truck percentage on Magnolia is based upon City of Corona Traffic counts
4. "No build" and "build" traffic volumes are the same. The Project Report completed in 2003 did not show a difference in the volumes for these two conditions.

LEVEL OF SERVICE SUMMARY

Location	LEVEL OF SERVICE (LOS)															
	2001				2025											
	EXISTING				NO BUILD				Alternative 2				Alternative 3			
	AM Peak Period		PM Peak Period		AM Peak Period		PM Peak Period		AM Peak Period		PM Peak Period		AM Peak Period		PM Peak Period	
	V/C , c(r) Delay, or pcph	LOS	V/C , c(r) Delay, or pcph	LOS	V/C , c(r) Delay, or pcph	LOS	V/C , c(r) Delay, or pcph	LOS	V/C , c(r) Delay, or pcph	LOS	V/C , c(r) Delay, or pcph	LOS	V/C , c(r) Delay, or pcph	LOS	V/C , c(r) Delay, or pcph	LOS
Magnolia Ave/Northbound Ramp Intersection	12.7	B	9.9	B	NA	F	NA	F	NA	F	32.5	D	7.4	B	5.6	B
Magnolia Ave/Southbound Ramp Intersection	31.1	D	NA	F	NA	F	NA	F	NA	F	32.5	D	NA	F	NA	F
Magnolia Ave/El Sobrante Road Intersection	7.7	B	NA	F	45.7	E	28.2	D	10.7	B	14.3	B	10.7	B	14.3	B
NB Exit Ramp / I-15 -- DIVERGE	1955/3010	E/B	1553/2307	D/A	2413/3939	F/B	1910/3001	E/B	2413/3939	F/B	1910/3001	E/B	2413/3939	F/B	1910/3001	E/B
NB Loop Entrance Ramp / I-15 -- MERGE	--	--	--	--	--	--	--	--	--	--	--	--	5101/10848	F/F	3841/8243	F/F
NB Diagonal Entrance Ramp / I-15 -- MERGE	3792/6267	F/F	3024/6472	F/D	5410/11196	F/F	4222/8672	F/F	4232/11346	F/F	3400/8788	F/F	4183/11196	F/F	3361/8672	F/F
SB Entrance Ramp / I-15 -- MERGE	1710/4099	D/B	3438/8139	F/F	2208/5036	F/C	4735/10628	F/F	2208/5036	F/C	4735/10628	F/F	2208/5036	F/C	4735/10628	F/F
SB Exit Ramp / I-15 -- DIVERGE	1075/2044	C/A	2017/3460	F/B	1172/2626	C/A	2404/4501	F/C	1172/2626	C/A	2404/4501	F/C	1172/2626	C/A	2404/4501	F/C
I-15 SB Between Route 91 and Magnolia Ave	0.50	B	0.87	C	0.66	C	1.13	F	0.66	C	1.13	F	0.66	C	1.13	F
I-15 NB Between Route 91 and Magnolia Ave	0.83	D	0.65	C	1.14	F	0.88	E	1.14	F	0.88	E	1.14	F	0.88	E
I-15 NB Between Magnolia Ave and Ontario Ave	0.76	C	0.58	C	0.99	E	0.75	C	0.99	E	0.75	C	0.95	E	0.73	C
I-15 SB Between Magnolia Ave and Ontario Ave	0.42	B	0.83	D	0.51	B	1.08	F	0.51	B	1.08	F	0.51	B	1.08	F

NA -- Not Attainable
V/C - Volume/Capacity
c(r) - Reserve Capacity
pcph -- Passenger Cars per Hour
xxxx/xxxx -- pcph Ramp/pcph Freeway
X/X -- LOS Ramp/LOS Freeway

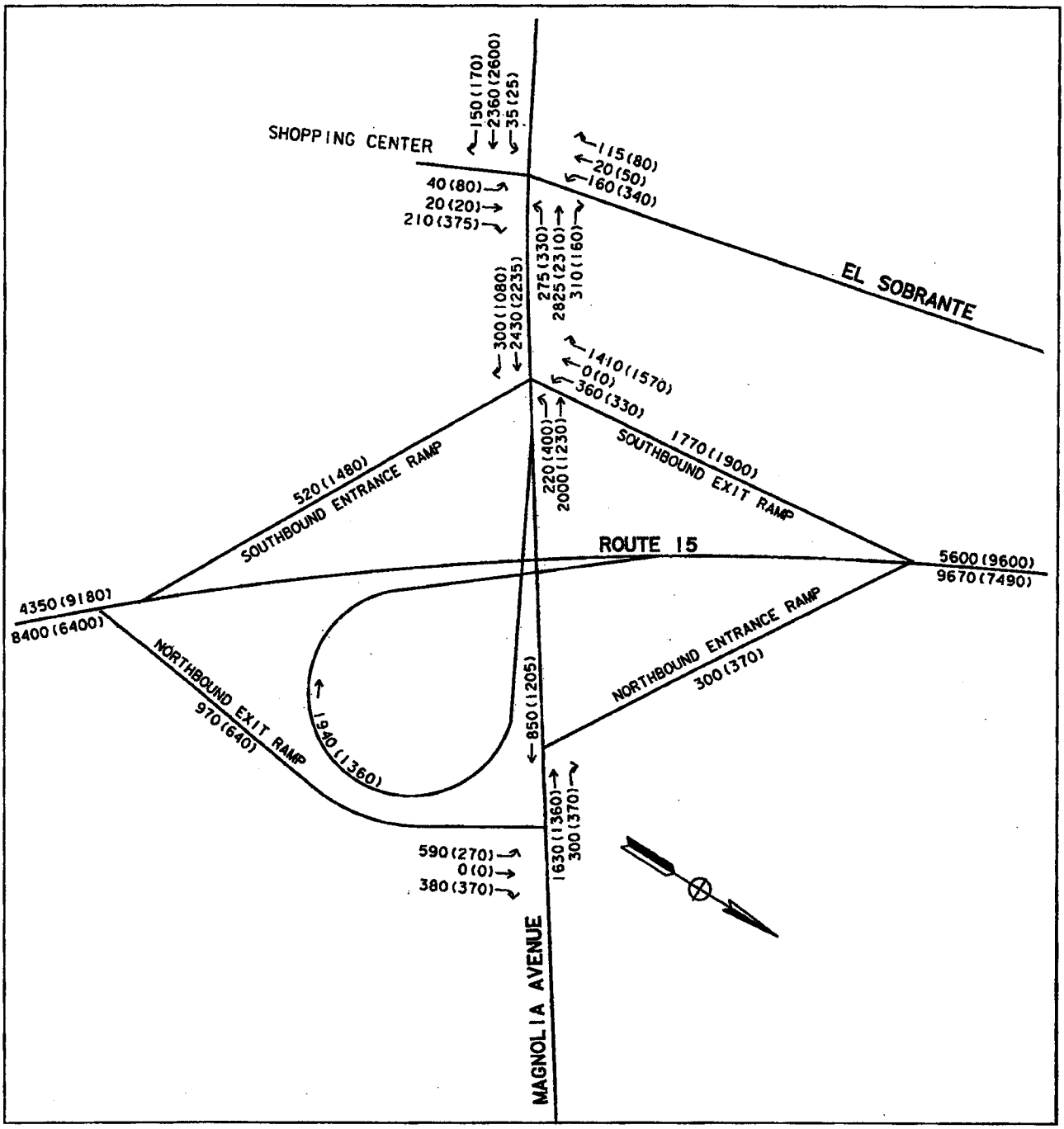


Legend

555/1265 AM/PM Peak Hour Volumes

EXISTING TRAFFIC VOLUMES (2001)
MAGNOLIA AVENUE INTERCHANGE

Caltrans



Legend

555/1265 AM/PM Peak Hour Volumes

PROJECTED TRAFFIC VOLUMES (2025)
MAGNOLIA AVENUE INTERCHANGE

Caltrans

PM10/2.5 Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

Project Description (from TIP, RTP, and/or project documents) **MPO ID#:** 20620

Construct direct connectors from NB I-215 to WB SR210 and from EB SR210 to SB I-215; a replacement bridge for 27th Street OC on I-215; a mixed flow lane on NB I-215 from 210/215 I/C to University Pkwy; an auxiliary lane on SB I-215 from University Pkwy to 210/215 I/C; a collector-distributor road along NB I-215 from Highland Avenue to 27th Street; replace loop off-ramp from NB I-215 to Highland Avenue with a slip off-ramp; reconfigure local streets east of I-215 off of 27th Street; and other miscellaneous associated improvements.

County:	**Narrative Location/Route & Postmiles**
San Bernardino	SR210 PM 21.8 to PM 22.1; I-215 PM 9.0 to PM 11.6
	Caltrans Projects – EA#: 444071/ 444081

Lead Agency: SANBAG

Contact Person	**Phone#**	**Fax#**	**Email**
Abunnasr Husain	(909) 889-8611 x 141	(909) 388-2002	ahusain@sanbag.ca.gov

Pollutants for which decision is needed		**PM10**	X	**PM2.5**		**CO**		**Other**
Decision Proposed:		**POAQC**	X	**Not POAQC**		**Accept Hot Spot Study**		

Federal Action Needed (describe in Comments below)

	CE		**EA or Draft EIS**		**FONSI or Final EIS**	X	**PS&E or Construction**	X	**Other**

Scheduled Date of Federal Action:

Current Programming Dates (as appropriate)

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	08/01/05	01/01/06	06/14/06	01/08/08
End	11/30/06	06/04/07	08/06/07	01/04/10

Project Purpose and Need (Summary):

This is the last contract of the final segment (Segment 11) of the SR 210 corridor to be constructed. Construction of this last segment is needed to complete the corridor and provide adequate connectivity between SR 210 and I-215.

Surrounding Land Use/Traffic Generators

Land Uses closest to the project include residential, open space, undeveloped, and some commercial areas. All traffic patterns are already in existence. The main contributors are I-215 and SR 30 (new SR 210). Other local street interchanges are located at Highland Avenue, 27th Street, and University Parkway.

State Highway/mainline AADT, % trucks, truck AADT (opening year)

Build Condition: Total ADT = 95,854 Truck ADT = 4,564 Truck % = 4.8 % (based on ADT)
No-Build Condition: Total ADT = 87,012 Truck ADT = 4,351 Truck % = 5.0 % (based on ADT)

State Highway/mainline AADT, % trucks, truck AADT (RTP horizon year)

Build Condition: Total ADT = 138,926 Truck ADT = 6,616 Truck % = 4.8 % (based on ADT)
No-Build Condition: Total ADT = 129,330 Truck ADT = 6,467 Truck % = 5.0 % (based on ADT)

If interchange(s) or intersection(s) involved, for worst-LOS interchange or intersection:

Cross-street AADT, % trucks, truck AADT (opening year)

Cross-street AADT, % trucks, truck AADT (RTP horizon year)

Comments/Explanation/Details

An Environmental Re-evaluation is ongoing at this time and is anticipated to be completed by October 2006. PS&E is scheduled for completion by January 2007. Federal approval is required for both activities. A two month review and approval period is anticipated for the required Federal actions.

I-215 is not part of the Southern California Goods Movement Network and the truck traffic is rather low as evidenced by the attached traffic data. This particular project is not making substantial changes to I-215 configuration, only what is necessary to make the Interchange with the new SR-210 operate in a viable, safe and efficient manner. SR-210 will not be operating as intended until this project is constructed and will increase congestion and poor levels of service on local streets. Mainline SR-210 is scheduled to be opened to traffic by Fall 2007.

Improved LOS on mainline I-215 and local streets will help improve the air quality.

Attachment:

- AM/PM Peak Hour Traffic Volumes, ADT, and LOS for Current Year, Opening Year, and Horizon Year for Build and No-Build conditions

REFERENCE:

Criteria for projects of air quality concern (40 CFR 93.123(b)(1)) – PM_{10} and $PM_{2.5}$ hot spots

(i) *New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;*

(ii) *Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related ot he project;*

(iii) *New bus and rail terminals and transfer points than have a significant number of diesel vehicles congregating at a single location;*

(iv) *Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and*

(v) *Projects in or affecting locations, areas, or categories of sites which are identified in the PM10 or PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.*

EXHIBIT 1
I-215 Traffic Volumes and LOS, Year 2006

NORTHBOUND

Location	2006 Traffic w/o Trucks			2006 Trucks			2006 Total Traffic with Trucks			No. of	2006 LOS	
	AM PK	PM PK	ADT	AM PK	PM PK	ADT	AM PK	PM PK	ADT	MF Lanes	AM PK	PM PK
I-215 South of 27th St	**1,829**	**2,744**	**30,491**	**96**	**144**	**1,605**	**1,926**	**2,889**	**32,096**	**2**	**B**	**C**
NB off ramp to 27th St.	300	342	4,279	16	18	225	315	360	4,505	1	B	C
I-215 North of 210 off ramp	**1,530**	**2,402**	**26,211**	**81**	**126**	**1,380**	**1,610**	**2,528**	**27,591**	**2**	**B**	**C**
NB on ramp from 27th St.	157	180	2,247	8	9	118	166	189	2,365	1	B	C
I-215 North of 27th St.on ramp	**1,687**	**2,582**	**28,458**	**89**	**136**	**1,498**	**1,776**	**2,717**	**29,956**	**2**	**B**	**C**
NB on ramp from EB SR-30	150	171	2,140	8	9	113	158	180	2,252	1	B	C
I-215 North of EB SR-30 on ramp	**1,837**	**2,753**	**30,598**	**97**	**145**	**1,610**	**1,934**	**2,898**	**32,208**	**2**	**B**	**C**
NB on ramp from WB SR-30	749	856	10,699	39	45	563	788	901	11,262	1	N/A	N/A
I-215 North of WB SR-30 on ramp	**2,586**	**3,609**	**41,296**	**136**	**190**	**2,173**	**2,722**	**3,799**	**43,470**	**3**	**B**	**C**
NB off ramp to University Ave.	974	1,123	14,978	51	59	788	1,025	1,182	15,766	1	B	C

N/A = Not Applicable - Exclusive on-ramp

SOUTHBOUND

Location	2006 Traffic w/o Trucks			2006 Trucks			2006 Total Traffic with Trucks			No. of	2006 LOS	
	AM PK	PM PK	ADT	AM PK	PM PK	ADT	AM PK	PM PK	ADT	MF Lanes	AM PK	PM PK
SB on ramp from University Ave.	1,220	1,134	17,439	64	60	918	1,284	1,194	18,356	1	D	C
I-215 South of on ramp from University Ave.	**3,410**	**2,407**	**40,120**	**179**	**127**	**2,112**	**3,590**	**2,534**	**42,231**	**2**	**D**	**C**
SB off ramp to SR-30 WB and EB	770	674	9,629	41	35	507	811	709	10,135	1	D	B
I-215 South of off ramp to SR-30 WB and EB	**2,640**	**1,733**	**30,491**	**139**	**91**	**1,605**	**2,779**	**1,824**	**32,096**	**2**	**C**	**B**
SB off ramp to 27th St.	103	90	1,284	5	5	68	108	95	1,351	1	C	B
I-215 South of off ramp to 27th St.	**2,537**	**1,643**	**29,207**	**134**	**86**	**1,537**	**2,671**	**1,730**	**30,744**	**2**	**C**	**B**
SB on ramp from 27th St.	514	449	6,419	27	24	338	541	473	6,757	1	D	C
I-215 South of on ramp from 27th St.	**3,051**	**2,093**	**35,626**	**161**	**110**	**1,875**	**3,211**	**2,203**	**37,501**	**2**	**C**	**B**

EXHIBIT 2
I-215 Traffic Volumes and LOS, Year 2009, No-Build

NORTHBOUND

Location	2009 Traffic w/o Trucks			2009 Trucks			2009 Total Traffic with Trucks			No. of	2009 LOS	
	AM PK	PM PK	ADT	AM PK	PM PK	ADT	AM PK	PM PK	ADT	MF Lanes	AM PK	PM PK
I-215 South of 27th St	**1,857**	**2,786**	**30,957**	**98**	**147**	**1,629**	**1,955**	**2,933**	**32,587**	**2**	**B**	**C**
NB off ramp to 27th St.	304	348	4,345	16	18	229	320	366	4,574	1	B	D
I-215 North of 210 off ramp	**1,553**	**2,439**	**26,612**	**82**	**128**	**1,401**	**1,635**	**2,567**	**28,013**	**2**	**B**	**C**
NB on ramp from 27th St.	160	182	2,281	8	10	120	168	192	2,401	1	B	C
I-215 North of 27th St.on ramp	**1,713**	**2,621**	**28,893**	**90**	**138**	**1,521**	**1,803**	**2,759**	**30,414**	**2**	**B**	**C**
NB on ramp from EB SR-30	152	174	2,172	8	9	114	160	183	2,287	1	C	D
I-215 North of EB SR-30 on ramp	**1,865**	**2,795**	**31,066**	**98**	**147**	**1,635**	**1,963**	**2,942**	**32,701**	**2**	**B**	**C**
NB on ramp from WB SR-30	760	869	10,862	40	46	572	800	915	11,434	1	N/A	N/A
I-215 North of WB SR-30 on ramp	**2,625**	**3,664**	**41,928**	**138**	**193**	**2,207**	**2,764**	**3,857**	**44,135**	**3**	**B**	**C**
NB off ramp to University Ave.	988	1,141	15,207	52	60	800	1,040	1,201	16,007	1	B	C

N/A = Not Applicable - Exclusive on-ramp

SOUTHBOUND

Location	2009 Traffic w/o Trucks			2009 Trucks			2009 Total Traffic with Trucks			No. of	2009 LOS	
	AM PK	PM PK	ADT	AM PK	PM PK	ADT	AM PK	PM PK	ADT	MF Lanes	AM PK	PM PK
SB on ramp from University Ave.	1,238	1,151	17,705	65	61	932	1,303	1,212	18,637	1	D	C
I-215 South of on ramp from University Ave.	**3,462**	**2,444**	**40,733**	**182**	**129**	**2,144**	**3,645**	**2,573**	**42,877**	**2**	**D**	**C**
SB off ramp to SR-30 WB and EB	782	684	9,776	41	36	515	823	720	10,291	1	D	B
I-215 South of off ramp to SR-30 WB and EB	**2,680**	**1,760**	**30,957**	**141**	**93**	**1,629**	**2,821**	**1,852**	**32,587**	**2**	**C**	**B**
SB off ramp to 27th St.	104	91	1,303	5	5	69	110	96	1,372	1	C	B
I-215 South of off ramp to 27th St.	**2,576**	**1,668**	**29,654**	**136**	**88**	**1,561**	**2,712**	**1,756**	**31,215**	**2**	**C**	**B**
SB on ramp from 27th St.	521	456	6,517	27	24	343	549	480	6,860	1	D	C
I-215 South of on ramp from 27th St.	**3,097**	**2,125**	**36,171**	**163**	**112**	**1,904**	**3,260**	**2,236**	**38,075**	**2**	**C**	**B**

EXHIBIT 3
I-215 Traffic Volumes and LOS, Year 2009
With Segment 11 Route 210 (SR-30)

NORTHBOUND

Location	2009 Traffic w/o Trucks			2009 Trucks			2009 Total Traffic with Trucks			No. of	2009 LOS	
	AM PK	PM PK	ADT	AM PK	PM PK	ADT	AM PK	PM PK	ADT	MF Lanes	AM PK	PM PK
I-215 South of 27th St	**2,210**	**3,538**	**39,254**	**110**	**177**	**1,963**	**2,320**	**3,715**	**41,216**	**3**	**B**	**C**
NB off ramp to WB 210	711	1,019	12,202	36	51	610	746	1,070	12,812	2	A	A
I-215 North of off ramp to WB 210	**1,499**	**2,519**	**27,051**	**75**	**126**	**1,353**	**1,574**	**2,645**	**28,404**	**3**	**A**	**B**
NB on ramp from 27th St.	168	192	2,437	8	10	122	176	202	2,559	1	B	B
I-215 North of 27th St.on ramp	**1,667**	**2,711**	**29,488**	**83**	**136**	**1,474**	**1,750**	**2,847**	**30,963**	**3**	**A**	**B**
NB on ramp from EB and WB 210	1,006	1,093	14,240	50	55	712	1,056	1,148	14,952	1	C	C
I-215 North of on ramp from WB I-210	**2,673**	**3,804**	**43,728**	**134**	**190**	**2,186**	**2,806**	**3,994**	**45,914**	**4**	**A**	**B**
NB off ramp to University Ave.	805	929	11,977	40	46	599	845	976	12,576	2	A	A

SOUTHBOUND

Location	2009 Traffic w/o Trucks			2009 Trucks			2009 Total Traffic with Trucks			No. of	2009 LOS	
	AM PK	PM PK	ADT	AM PK	PM PK	ADT	AM PK	PM PK	ADT	MF Lanes	AM PK	PM PK
SB on ramp from University Ave.	1,259	1,211	18,158	63	61	908	1,322	1,271	19,066	1	N/A	N/A
I-215 South of on ramp from University Ave.	**3,812**	**3,013**	**47,562**	**191**	**151**	**2,378**	**4,002**	**3,164**	**49,940**	**3**	**C**	**B**
SB off ramp to 210 WB and EB	870	842	11,658	44	42	583	914	884	12,241	2	A	A
I-215 South of off ramp to 210 WB and EB	**2,941**	**2,172**	**35,904**	**147**	**109**	**1,795**	**3,089**	**2,280**	**37,700**	**2**	**C**	**B**
SB off ramp to 27th St.	110	114	1,525	6	6	76	116	119	1,601	1	C	B
I-215 South of off-ramp to 27th Street	**2,831**	**2,058**	**34,380**	**142**	**103**	**1,719**	**2,973**	**2,161**	**36,099**	**2**	**C**	**B**
SB on ramp from 210 EB	1,364	1,110	17,670	68	55	883	1,432	1,165	18,553	2	N/A	N/A
I-215 South of on ramp from 210 EB	**4,195**	**3,168**	**52,049**	**210**	**158**	**2,602**	**4,405**	**3,326**	**54,652**	**3**	**D**	**B**
SB on ramp from 27th St.	244	195	3,137	12	10	157	257	204	3,293	1	D	C
I-215 South of on ramp from 27th St.	**4,440**	**3,363**	**55,186**	**222**	**168**	**2,759**	**4,662**	**3,531**	**57,945**	**3**	**C**	**B**

EXHIBIT 4
I-215 Traffic Volumes and LOS, Year 2020, No-Build

NORTHBOUND

Location	2020 Traffic w/o Trucks			2020 Trucks			2020 Total Traffic with Trucks			No. of	2020 LOS	
	AM PK	PM PK	ADT	AM PK	PM PK	ADT	AM PK	PM PK	ADT	MF Lanes	AM PK	PM PK
I-215 South of 27th St	**2,321**	**4,500**	**48,735**	**122**	**237**	**2,565**	**2,443**	**4,737**	**51,300**	**2**	**C**	**F**
NB off ramp to 27th St.	346	395	4,940	18	21	260	364	416	5,200	1	B	F
I-215 North of 210 off ramp	**1,975**	**4,105**	**43,795**	**104**	**216**	**2,305**	**2,079**	**4,321**	**46,100**	**2**	**B**	**E**
NB on ramp from 27th St.	181	207	2,594	10	11	137	191	218	2,730	1	B	F
I-215 North of 27th St.on ramp	**2,157**	**4,312**	**46,389**	**114**	**227**	**2,442**	**2,270**	**4,539**	**48,830**	**2**	**C**	**F**
NB on ramp from EB SR-30	173	198	2,470	9	10	130	182	208	2,600	1	B	F
I-215 North of EB SR-30 on ramp	**2,329**	**4,510**	**48,859**	**123**	**237**	**2,572**	**2,452**	**4,747**	**51,430**	**2**	**C**	**F**
NB on ramp from WB SR-30	865	988	12,350	46	52	650	910	1,040	13,000	1	N/A	N/A
I-215 North of WB SR-30 on ramp	**3,194**	**5,498**	**61,209**	**168**	**289**	**3,222**	**3,362**	**5,787**	**64,430**	**3**	**B**	**D**
NB off ramp to University Ave.	899	1,135	14,564	47	60	767	946	1,195	15,330	1	B	C

N/A = Not Applicable - Exclusive on-ramp

SOUTHBOUND

Location	2020 Traffic w/o Trucks			2020 Trucks			2020 Total Traffic with Trucks			No. of	2020 LOS	
	AM PK	PM PK	ADT	AM PK	PM PK	ADT	AM PK	PM PK	ADT	MF Lanes	AM PK	PM PK
SB on ramp from University Ave.	1,164	1,270	17,385	61	67	915	1,225	1,337	18,300	1	F	F
I-215 South of on ramp from University Ave.	**4,418**	**4,215**	**61,655**	**233**	**222**	**3,245**	**4,651**	**4,437**	**64,900**	**2**	**F**	**F**
SB off ramp to SR-30 WB and EB	889	778	11,115	47	41	585	936	819	11,700	1	F	F
I-215 South of off ramp to SR-30 WB and EB	**3,529**	**3,437**	**50,540**	**186**	**181**	**2,660**	**3,715**	**3,618**	**53,200**	**2**	**D**	**D**
SB off ramp to 27th St.	119	104	1,482	6	5	78	125	109	1,560	1	C	C
I-215 South of off ramp to 27th St.	**3,411**	**3,334**	**49,058**	**180**	**175**	**2,582**	**3,590**	**3,509**	**51,640**	**2**	**D**	**D**
SB on ramp from 27th St.	593	519	7,410	31	27	390	624	546	7,800	1	F	E
I-215 South of on ramp from 27th St.	**4,003**	**3,852**	**56,468**	**211**	**203**	**2,972**	**4,214**	**4,055**	**59,440**	**2**	**E**	**E**

EXHIBIT 5
I-215 Traffic Volumes and LOS, Year 2020
With Segment 11 Route 210 (SR-30)

NORTHBOUND	2020 Traffic w/o Trucks			2020 Trucks			2020 Total Traffic with Trucks			No. of	2020 LOS	
Location	AM PK	PM PK	ADT	AM PK	PM PK	ADT	AM PK	PM PK	ADT	MF Lanes	AM PK	PM PK
I-215 South of 27th St	**3,252**	**5,918**	**65,500**	**163**	**296**	**3,275**	**3,415**	**6,214**	**68,775**	**3**	**B**	**E**
NB off ramp to WB 210	1,106	1,677	19,900	55	84	995	1,161	1,761	20,895	2	A	A
I-215 North of off ramp to WB 210	**2,146**	**4,241**	**45,600**	**107**	**212**	**2,280**	**2,253**	**4,453**	**47,880**	**3**	**B**	**C**
NB on ramp from 27th St.	176	202	2,700	9	10	135	185	212	2,835	1	B	C
I-215 North of 27th St.on ramp	**2,322**	**4,443**	**48,300**	**116**	**222**	**2,415**	**2,438**	**4,665**	**50,715**	**3**	**B**	**C**
NB on ramp from EB and WB 210	1,225	1,136	16,900	61	57	845	1,286	1,193	17,745	1	C	D
I-215 North of on ramp from WB I-210	**3,547**	**5,579**	**65,200**	**177**	**279**	**3,260**	**3,724**	**5,858**	**68,460**	**4**	**B**	**C**
NB off ramp to University Ave.	901	1,138	14,600	45	57	730	946	1,195	15,330	2	B	C

SOUTHBOUND	2020 Traffic w/o Trucks			2020 Trucks			2020 Total Traffic with Trucks			No. of	2020 LOS	
Location	AM PK	PM PK	ADT	AM PK	PM PK	ADT	AM PK	PM PK	ADT	MF Lanes	AM PK	PM PK
SB on ramp from University Ave.	1,167	1,273	17,430	58	64	872	1,225	1,337	18,302	1	N/A	N/A
I-215 South of on ramp from University Ave.	**4,625**	**4,771**	**67,110**	**231**	**239**	**3,356**	**4,856**	**5,010**	**70,466**	**3**	**C**	**D**
SB off ramp to 210 WB and EB	1,087	1,326	17,240	54	66	862	1,141	1,392	18,102	2	A	A
I-215 South of off ramp to 210 WB and EB	**3,538**	**3,445**	**49,870**	**177**	**172**	**2,494**	**3,715**	**3,617**	**52,364**	**2**	**D**	**D**
SB off ramp to 27th St.	119	183	2,160	6	9	108	125	192	2,268	1	C	C
I-215 South of off-ramp to 27th Street	**3,419**	**3,262**	**47,710**	**171**	**163**	**2,386**	**3,590**	**3,425**	**50,096**	**2**	**D**	**D**
SB on ramp from 210 EB	1,696	1,380	21,970	85	69	1,099	1,781	1,449	23,069	2	N/A	N/A
I-215 South of on ramp from 210 EB	**5,115**	**4,642**	**69,680**	**256**	**232**	**3,484**	**5,371**	**4,874**	**73,164**	**3**	**D**	**C**
SB on ramp from 27th St.	304	242	3,900	15	12	195	319	254	4,095	1	C	D
I-215 South of on ramp from 27th St.	**5,419**	**4,884**	**73,580**	**271**	**244**	**3,679**	**5,690**	**5,128**	**77,259**	**3**	**D**	**D**

N/A = Ramp analysis not applicable - exclusive lane for on-ramp

RTIP ID# *(required)* 200434

Project Description *(clearly describe project)*
On I-10 in Redlands and Yucaipa from Ford Street overcrossing to Live Oak Canyon Road. Construct one westbound mixed flow lane.

Type of Project *(use Table 1 on instruction sheet)*
Change to an existing State Highway

County	**Narrative Location/Route & Postmiles** 08-SBD-10 PM33.3-36.9
San Bernardino	**Caltrans Projects – EA#** 0F150

Lead Agency: SANBAG

Contact Person	**Phone#**	**Fax#**	**Email**
LISA DaSilva	909-884-8276	909-388-2002	ldasilva@sanbag.ca.gov

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 x** **PM10 x**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

	Categorical Exclusion (NEPA)	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**
X					

Scheduled Date of Federal Action: Nov 2006

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	Jul 2004	Mar 2007	Mar 2007	Dec 2009
End	Feb 2007	Nov 2009	Nov 2009	Jun 2001

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*
Interstate 10 (I-10) serves as a major east/west urban corridor and commuter route between Los Angeles, San Bernardino County, and points east. Westbound traffic on I-10 between the Live Oak Canyon Road Interchange in Yucaipa and the State Route 30 (SR-30)/State Route 210 (SR-210) interchange in Redlands is consistently heavy during a.m. peak hours. The Median Mixed-Flow Lane Addition Project (MFLA) would add a westbound general-purpose lane between Ford Street and Live Oak Canyon Road. The proposed action would extend the MFLA from Ford Street to Live Oak Canyon Road, relieving congestion and improving safety. The extension of the general purpose lane would complete the mixed-flow lane build out in preparation for the future I-10 high-occupancy vehicle (HOV) projects.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
The land uses along both sides of I-10 between Ford Street in Redlands and Live Oak Canyon Road in Yucaipa is primarily open space with some residential. Several commercial/light industrial developments are located between Yucaipa Avenue and Live Oak Canyon Road within the vicinity of the local highway interchanges.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
LOS refer to the attached tables E and F, AADT = 171,900*, Truck AADT = 21,400* (12.4%)

* These traffic volumes apply to both the No Build and Build Alternatives. See RTP Horizon Year below.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
LOS refer to the attached tables G and H, AADT = 279,000*, Truck AADT = 34,800* (12.5%)

* These traffic volumes apply to both the No Build and Build Alternatives. Based on the Traffic Analysis prepared by LSA Associates, Inc. (April 2006) the proposed project would not increase the traffic volumes along westbound I-10. The modeled demand volumes entering the proposed project limits exceed the capacity of the freeway in 2035. The entering volumes are constrained to reflect the maximum number of vehicles that would be able to enter the study area.

Adding lanes on the freeway are not in itself generating additional trips. Although there may be slight changes in traffic patterns entering and exiting due to the additional lane, however, it should be noted that the model data from SCAG is based on AM (3 hour) and PM (4 hour) peak periods, which are basically modules from the "daily" model. There could be changes in number of vehicles entering and exiting, but the total peak period volume is not expected to change (i.e. 3 hours for AM and 4 hours for PM). The method of calculating the Peak Hour volumes is multiplying AM peak period volumes by a factor of 0.38 and multiplying PM peak period by a factor of 0.28. These factors are based on SANBAG guidelines. Hence, the peak hour volumes would come out the same for both with and without the project.

"Induced traffic" could be an issue if there were other parallel freeways or major arterials running along, in which case some traffic may get diverted to this segment because of added capacity. However, this is not the case here. Hence, the total daily volume would remain the same or the difference would be insignificant. And, since the peak period volumes are just modules of daily traffic, the difference in peak hour volumes with and without the project would be insignificant.

Additionally, there are no changes in the build vs no build for the opening year (2011) traffic volumes because they are based on interpolation between year 2035 and year 2004 volumes.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
Not Applicable

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
Not Applicable

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
Based on the Traffic Analysis prepared by LSA Associates, Inc. (April 2006) the proposed project would not increase the traffic volumes along westbound I-10. In addition, the construction of the mixed flow lane would improve the roadway level of service (LOS). The attached Tables E through H from the traffic analysis show the improvements in the traffic flow as a result of the proposed project.

Comments/Explanation/Details *(attach additional sheets as necessary)*
See attached particulate matter analysis.

Particulate Matter (PM_{10} and $PM_{2.5}$) Analysis

The proposed project is within a nonattainment area for federal $PM_{2.5}$ and PM_{10} standards. Therefore, per 40 CFR Part 93 analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

i. The proposed project is not a new or expanded highway project that would have a significant number or a significant increase in diesel vehicles. The existing and future traffic volumes along this segment of I-10 exceed the 125,000 ADT and the eight percent truck traffic POAQC thresholds for new highway construction. However, the proposed I-10 freeway is currently and would continue to be constrained to the east of the proposed project limits. Therefore, as shown in the attached Tables E through H the proposed project would not increase the traffic volumes along this segment of I-10. This type of project improves freeway operations by reducing traffic congestion and improving merge operations.

ii. The proposed project does not affect intersections that are at level of service (LOS) D, E, or F with a significant number of diesel vehicles. Based on the *Traffic Analysis*, the proposed project would not increase the traffic volumes along the local roadways within the project vicinity. In addition, the proposed project would reduce the delay and improve the LOS along I-10. The LOS conditions in the project vicinity with and without the proposed project are shown in Tables E through H.

iii. The proposed project does not include the construction of a new bus or rail terminal.

iv. The proposed project does not expand an existing bus or rail terminal.

Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM_{10} or $PM_{2.5}$ violation.

Table D - Existing Freeway Volumes and Levels of Service

Segment	Type	AM PEAK HOUR									
		Mixed Flow Lanes	HOV Lanes	Total Mainline Volume	HOV Volume	Mixed Flow Volume	Entering Volume	Exiting Volume	Speed (km/hr)	Density (pc/km/ln)	LOS
I-10 Westbound											
1 . East of Live Oak Canyon Road On-Ramp	Basic	3	0	3,270	0	3,270			105.2	10.6	B
2 . Live Oak Canyon Road On-Ramp	1 Lane on	3	0	3,270	0	3,270	1,042		95.0	15.5	C
3 . Live Oak Canyon Road On-Ramp to Yucaipa Boulevard Off-Ramp	Basic	3	0	4,312	0	4,312			105.2	13.9	C
4 . Yucaipa Boulevard Off-Ramp	1 Lane off	3	0	4,312	0	4,312		93	92.3	17.1	D
5 . Yucaipa Boulevard Off-Ramp to Yucaipa Boulevard On-Ramp	Basic	3	0	4,219	0	4,219			105.2	13.6	C
6 . Yucaipa Boulevard On-Ramp	1 Lane on	3	0	4,219	0	4,219	1,178		91.0	18.1	D
7 . Yucaipa Boulevard On-Ramp to Wabash Avenue Off-Ramp	Basic	3	0	5,397	0	5,397			103.3	17.8	D
8 . Wabash Avenue Off-Ramp	1 Lane off	3	0	5,397	0	5,397		249	91.7	20.2	D
9 . Wabash Avenue Off-Ramp to Ford Street Off-Ramp	Basic	3	0	5,148	0	5,148			104.4	16.8	D
10 . Ford Street Off-Ramp	1 Lane off	3	0	5,148	0	5,148		431	91.0	19.7	D

Segment	Type	PM PEAK HOUR									
		Mixed Flow Lanes	HOV Lanes	Total Mainline Volume	HOV Volume	Mixed Flow Volume	Entering Volume	Exiting Volume	Speed (km/hr)	Density (pc/km/ln)	LOS
I-10 Westbound											
1 . East of Live Oak Canyon Road On-Ramp	Basic	3	0	2,676	0	2,676			105.2	8.7	B
2 . Live Oak Canyon Road On-Ramp	1 Lane on	3	0	2,676	0	2,676	449		97.0	11.0	B
3 . Live Oak Canyon Road On-Ramp to Yucaipa Boulevard Off-Ramp	Basic	3	0	3,125	0	3,125			105.2	10.1	B
4 . Yucaipa Boulevard Off-Ramp	1 Lane off	3	0	3,125	0	3,125		91	92.3	13.5	C
5 . Yucaipa Boulevard Off-Ramp to Yucaipa Boulevard On-Ramp	Basic	3	0	3,033	0	3,033			105.2	9.8	B
6 . Yucaipa Boulevard On-Ramp	1 Lane on	3	0	3,033	0	3,033	837		96.0	13.8	C
7 . Yucaipa Boulevard On-Ramp to Wabash Avenue Off-Ramp	Basic	3	0	3,871	0	3,871			105.2	12.5	C
8 . Wabash Avenue Off-Ramp	1 Lane off	3	0	3,871	0	3,871		58	92.4	15.8	C
9 . Wabash Avenue Off-Ramp to Ford Street Off-Ramp	Basic	3	0	3,813	0	3,813			105.2	12.3	C
10 . Ford Street Off-Ramp	1 Lane off	3	0	3,813	0	3,813		252	91.7	15.8	C

Table E - Year 2011 Alternative 1 Freeway Volumes and Levels of Service

Segment	Type	AM PEAK HOUR									
		Mixed Flow Lanes	HOV Lanes	Total Mainline Volume	HOV Volume	Mixed Flow Volume	Entering Volume	Exiting Volume	Speed (km/hr)	Density (pc/km/ln)	LOS
I-10 Westbound											
1 . East of Live Oak Canyon Road On-Ramp	Basic	3	0	4,197	0	4,197			105.2	13.6	C
2 . Live Oak Canyon Road On-Ramp	1 Lane on	3	0	4,197	0	4,197	1,091		92.0	18.4	D
3 . Live Oak Canyon Road On-Ramp to Yucaipa Boulevard Off-Ramp	Basic	3	0	5,288	0	5,288			103.8	17.3	D
4 . Yucaipa Boulevard Off-Ramp	1 Lane off	3	0	5,288	0	5,288		97	92.3	19.8	D
5 . Yucaipa Boulevard Off-Ramp to Yucaipa Boulevard On-Ramp	Basic	3	0	5,192	0	5,192			104.2	16.9	D
6 . Yucaipa Boulevard On-Ramp	1 Lane on	3	0	5,192	0	5,192	1,522		80.0	23.3	F *
7 . Yucaipa Boulevard On-Ramp to Wabash Avenue Off-Ramp	Basic	3	0	6,714	0	6,714			86.0	26.6	E
8 . Wabash Avenue Off-Ramp	1 Lane off	3	0	6,714	0	6,714		305	91.5	23.4	E
9 . Wabash Avenue Off-Ramp to Ford Street Off-Ramp	Basic	3	0	6,409	0	6,409			92.1	23.7	E
10 . Ford Street Off-Ramp	1 Lane off	3	0	6,409	0	6,409		441	90.9	22.8	E

Segment	Type	PM PEAK HOUR									
		Mixed Flow Lanes	HOV Lanes	Total Mainline Volume	HOV Volume	Mixed Flow Volume	Entering Volume	Exiting Volume	Speed (km/hr)	Density (pc/km/ln)	LOS
I-10 Westbound											
1 . East of Live Oak Canyon Road On-Ramp	Basic	3	0	3,585	0	3,585			105.2	8.7	B
2 . Live Oak Canyon Road On-Ramp	1 Lane on	3	0	3,585	0	3,585	438		97.0	11.0	B
3 . Live Oak Canyon Road On-Ramp to Yucaipa Boulevard Off-Ramp	Basic	3	0	4,023	0	4,023			105.2	10.1	B
4 . Yucaipa Boulevard Off-Ramp	1 Lane off	3	0	4,023	0	4,023		89	92.3	13.5	C
5 . Yucaipa Boulevard Off-Ramp to Yucaipa Boulevard On-Ramp	Basic	3	0	3,934	0	3,934			105.2	9.8	B
6 . Yucaipa Boulevard On-Ramp	1 Lane on	3	0	3,934	0	3,934	1,061		96.0	13.8	C
7 . Yucaipa Boulevard On-Ramp to Wabash Avenue Off-Ramp	Basic	3	0	4,995	0	4,995			105.2	12.5	C
8 . Wabash Avenue Off-Ramp	1 Lane off	3	0	4,995	0	4,995		102	92.4	15.8	C
9 . Wabash Avenue Off-Ramp to Ford Street Off-Ramp	Basic	3	0	4,893	0	4,893			105.2	12.3	C
10 . Ford Street Off-Ramp	1 Lane off	3	0	4,893	0	4,893		256	91.7	15.8	C

* Exceeds LOS standard

Table F - Year 2011 Alternative 2 Freeway Volumes and Levels of Service

Segment	Type	AM PEAK HOUR									
		Mixed Flow Lanes	HOV Lanes	Total Mainline Volume	HOV Volume	Mixed Flow Volume	Entering Volume	Exiting Volume	Speed (km/hr)	Density (pc/km/ln)	LOS
I-10 Westbound											
1 . East of Live Oak Canyon Road On-Ramp	Basic	3	0	4,197	0	4,197			105.2	13.6	C
2 . Live Oak Canyon Road On-Ramp	Lane addition	3	0	4,197	0	4,197	1,091				#
3 . Live Oak Canyon Road On-Ramp to Yucaipa Boulevard Off-Ramp	Basic	4	0	5,288	0	5,288			107.6	12.5	C
4 . Yucaipa Boulevard Off-Ramp	1 Lane off	4	0	5,288	0	5,288		97	92.3	14.6	C
5 . Yucaipa Boulevard Off-Ramp to Yucaipa Boulevard On-Ramp	Basic	4	0	5,192	0	5,192			107.6	12.3	C
6 . Yucaipa Boulevard On-Ramp	2 Lane on	4	0	5,192	0	5,192	1,522		102.0	5.4	A
7 . Yucaipa Boulevard On-Ramp to Wabash Avenue Off-Ramp	Basic	4	0	6,714	0	6,714			106.8	16.0	D
8 . Wabash Avenue Off-Ramp	1 Lane off	4	0	6,714	0	6,714		305	91.5	18.6	D
9 . Wabash Avenue Off-Ramp to Ford Street Off-Ramp	Basic	4	0	6,409	0	6,409			107.3	15.2	C
10 . Ford Street Off-Ramp	1 Lane off	4	0	6,409	0	6,409		441	90.9	18.3	D

Segment	Type	PM PEAK HOUR									
		Mixed Flow Lanes	HOV Lanes	Total Mainline Volume	HOV Volume	Mixed Flow Volume	Entering Volume	Exiting Volume	Speed (km/hr)	Density (pc/km/ln)	LOS
I-10 Westbound											
1 . East of Live Oak Canyon Road On-Ramp	Basic	3	0	3,585	0	3,585			105.2	11.6	C
2 . Live Oak Canyon Road On-Ramp	Lane addition	3	0	3,585	0	3,585	438				#
3 . Live Oak Canyon Road On-Ramp to Yucaipa Boulevard Off-Ramp	Basic	4	0	4,023	0	4,023			107.6	9.5	B
4 . Yucaipa Boulevard Off-Ramp	1 Lane off	4	0	4,023	0	4,023		89	92.3	11.6	B
5 . Yucaipa Boulevard Off-Ramp to Yucaipa Boulevard On-Ramp	Basic	4	0	3,934	0	3,934			107.6	9.3	B
6 . Yucaipa Boulevard On-Ramp	2 Lane on	4	0	3,934	0	3,934	1,061		103.0	2.0	A
7 . Yucaipa Boulevard On-Ramp to Wabash Avenue Off-Ramp	Basic	4	0	4,995	0	4,995			107.6	11.8	C
8 . Wabash Avenue Off-Ramp	1 Lane off	4	0	4,995	0	4,995		102	92.3	14.0	C
9 . Wabash Avenue Off-Ramp to Ford Street Off-Ramp	Basic	4	0	4,893	0	4,893			107.6	11.6	C
10 . Ford Street Off-Ramp	1 Lane off	4	0	4,893	0	4,893		256	91.7	14.2	C

HCM provides no measure of LOS for lane additions and lane drops

Table G - Year 2035 Alternative 1 Freeway Volumes and Levels of Service

Segment	Type	AM PEAK HOUR									
		Mixed Flow Lanes	HOV Lanes	Total Mainline Volume	HOV Volume	Mixed Flow Volume	Entering Volume	Exiting Volume	Speed (km/hr)	Density (pc/km/ln)	LOS
I-10 Westbound											
1 . East of Live Oak Canyon Road On-Ramp	Basic	3	0	6,835	0	6,835			83.1	28.0	E
2 . Live Oak Canyon Road On-Ramp	1 Lane on	3	0	6,835	0	6,835	1,258		59.9	26.8	F *
3 . Live Oak Canyon Road On-Ramp to Yucaipa Boulevard Off-Ramp	Basic	3	0	8,093	0	8,093			†	†	F *
4 . Yucaipa Boulevard Off-Ramp	1 Lane off	3	0	8,093	0	8,093		108	92.2	26.1	F *
5 . Yucaipa Boulevard Off-Ramp to Yucaipa Boulevard On-Ramp	Basic	3	0	7,985	0	7,985			†	†	F *
6 . Yucaipa Boulevard On-Ramp	1 Lane on	3	0	7,985	0	7,985	2,705			36.9	F *
7 . Yucaipa Boulevard On-Ramp to Wabash Avenue Off-Ramp	Basic	3	0	10,690	0	10,690			†	†	F *
8 . Wabash Avenue Off-Ramp	1 Lane off	3	0	10,690	0	10,690		495	90.7	30.1	F *
9 . Wabash Avenue Off-Ramp to Ford Street Off-Ramp	Basic	3	0	10,195	0	10,195			†	†	F *
10 . Ford Street Off-Ramp	1 Lane off	3	0	10,195	0	10,195		476	90.8	29.5	F *

Segment	Type	PM PEAK HOUR									
		Mixed Flow Lanes	HOV Lanes	Total Mainline Volume	HOV Volume	Mixed Flow Volume	Entering Volume	Exiting Volume	Speed (km/hr)	Density (pc/km/ln)	LOS
I-10 Westbound											
1 . East of Live Oak Canyon Road On-Ramp	Basic	3	0	6,239	0	6,239			94.9	22.4	E
2 . Live Oak Canyon Road On-Ramp	1 Lane on	3	0	6,239	0	6,239	403		86.9	21.1	D
3 . Live Oak Canyon Road On-Ramp to Yucaipa Boulevard Off-Ramp	Basic	3	0	6,642	0	6,642			87.6	25.8	E
4 . Yucaipa Boulevard Off-Ramp	1 Lane off	3	0	6,642	0	6,642		83	92.3	23.1	E
5 . Yucaipa Boulevard Off-Ramp to Yucaipa Boulevard On-Ramp	Basic	3	0	6,559	0	6,559			89.2	25.0	E
6 . Yucaipa Boulevard On-Ramp	1 Lane on	3	0	6,559	0	6,559	1,829		40.3	28.7	F *
7 . Yucaipa Boulevard On-Ramp to Wabash Avenue Off-Ramp	Basic	3	0	8,388	0	8,388			†	†	F *
8 . Wabash Avenue Off-Ramp	1 Lane off	3	0	8,388	0	8,388		253	91.7	26.7	F *
9 . Wabash Avenue Off-Ramp to Ford Street Off-Ramp	Basic	3	0	8,134	0	8,134			†	†	F *
10 . Ford Street Off-Ramp	1 Lane off	3	0	8,134	0	8,134		271	91.6	26.3	F *

* Exceeds LOS standard

† Speed and density not defined for over-capacity segment

Table H - Year 2035 Alternative 2 Freeway Volumes and Levels of Service

Segment	Type	AM PEAK HOUR									
		Mixed Flow Lanes	HOV Lanes	Total Mainline Volume	HOV Volume	Mixed Flow Volume	Entering Volume	Exiting Volume	Speed (km/hr)	Density (pc/km/ln)	LOS
I-10 Westbound											
1 . East of Live Oak Canyon Road On-Ramp	Basic	3	0	6,835	0	6,835			83.1	28.0	E
2 . Live Oak Canyon Road On-Ramp	Lane addition	3	0	6,835	0	6,835	1,258				#
3 . Live Oak Canyon Road On-Ramp to Yucaipa Boulevard Off-Ramp	Basic	4	0	8,093	0	8,093			98.8	20.9	D
4 . Yucaipa Boulevard Off-Ramp	1 Lane off	4	0	8,093	0	8,093		108	92.2	21.3	D
5 . Yucaipa Boulevard Off-Ramp to Yucaipa Boulevard On-Ramp	Basic	4	0	7,985	0	7,985			99.8	20.4	D
6 . Yucaipa Boulevard On-Ramp	2 Lane on	4	0	7,985	0	7,985	2,705		90.0	13.7	F *
7 . Yucaipa Boulevard On-Ramp to Wabash Avenue Off-Ramp	Basic	4	0	10,690	0	10,690			†	†	F *
8 . Wabash Avenue Off-Ramp	1 Lane off	4	0	10,690	0	10,690		495	90.7	28.6	F *
9 . Wabash Avenue Off-Ramp to Ford Street Off-Ramp	Basic	4	0	10,195	0	10,195			†	†	F *
10 . Ford Street Off-Ramp	1 Lane off	4	0	10,195	0	10,195		476	90.8	27.4	F *

Segment	Type	PM PEAK HOUR									
		Mixed Flow Lanes	HOV Lanes	Total Mainline Volume	HOV Volume	Mixed Flow Volume	Entering Volume	Exiting Volume	Speed (km/hr)	Density (pc/km/ln)	LOS
I-10 Westbound											
1 . East of Live Oak Canyon Road On-Ramp	Basic	3	0	6,239	0	6,239			94.9	21.9	E
2 . Live Oak Canyon Road On-Ramp	Lane addition	3	0	6,239	0	6,239	403				#
3 . Live Oak Canyon Road On-Ramp to Yucaipa Boulevard Off-Ramp	Basic	4	0	6,642	0	6,642			107.0	15.8	C
4 . Yucaipa Boulevard Off-Ramp	1 Lane off	4	0	6,642	0	6,642		83	92.3	17.8	D
5 . Yucaipa Boulevard Off-Ramp to Yucaipa Boulevard On-Ramp	Basic	4	0	6,559	0	6,559			107.1	15.6	C
6 . Yucaipa Boulevard On-Ramp	2 Lane on	4	0	6,559	0	6,559	1,829		100.0	8.3	B
7 . Yucaipa Boulevard On-Ramp to Wabash Avenue Off-Ramp	Basic	4	0	8,388	0	8,388			95.5	22.4	E
8 . Wabash Avenue Off-Ramp	1 Lane off	4	0	8,388	0	8,388		253	91.7	22.4	E
9 . Wabash Avenue Off-Ramp to Ford Street Off-Ramp	Basic	4	0	8,134	0	8,134			98.4	21.1	D
10 . Ford Street Off-Ramp	1 Lane off	4	0	8,134	0	8,134		271	91.6	21.9	D

* Exceeds LOS standard

† Speed and density not defined for over-capacity segment

\# HCM provides no measure of LOS for lane additions and lane drops

PM10/2.5 Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

Project Description (from TIP, RTP, and/or project documents) **MPO ID#:** RIV041052

AT SR-60/NASON ST IC & MORENO BEACH DR IC: WIDEN NASON OC 2 TO 6 LNS; MODIFY MORENO BEACH DR IC - WIDEN 2 TO 6 LNS, REALIGN/WIDEN RAMPS, ADD WB ON RAMP, ADD EB/WB AUX LN (per adopted 2004 RTP) (see the comments section below for additional info)

County:	**Narrative Location/Route & Postmiles**
Riverside County	City of Moreno Valley/State Route 60 (SR-60) from PM 18.3/19.5 **Caltrans Projects – EA#:** 323010

Lead Agency: City of Moreno Valley

Contact Person	**Phone#**	**Fax#**	**Email**
Margery Lazarus	(951) 413-3133	(951) 413-3170	margeryl@moval.org

Pollutants for which decision is needed	✓	**PM10**	✓	**PM2.5**		**CO**		**Other**
Decision Proposed:		**POAQC**	✓	**Not POAQC**		**Accept Hot Spot Study**		

Federal Action Needed (describe in Comments below)

✓	**CE**		**EA or Draft EIS**		**FONSI or Final EIS**		**PS&E or Construction**		**Other**

Scheduled Date of Federal Action: Not Applicable (NEPA Document is a Programmatic Categorical Exclusion [PCE])

Current Programming Dates (as appropriate)

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	04/05	04/05		
End	08/09	08/09		

Project Purpose and Need (Summary):

The purpose of the project is to provide operational improvements, to alleviate congestion, and to address the existing roadway and bridge deficiencies. The project is needed to improve safety, to bring the roadway and bridge features up to current standards, and to provide acceptable levels of service on the freeway ramps and the ramp terminal intersections.

Surrounding Land Use/Traffic Generators

Northwest & northeast quadrants of SR-60/Nason Street – single family residential developments
Southwest quadrant of SR-60/Moreno Beach Drive – commercial development
Southeast quadrant of SR-60/Moreno Beach Drive – auto mall

State Highway/mainline AADT, % trucks, truck AADT (opening year)

Opening Year (2011)
AADT: 96,000 (interpolated between 2006 volumes and 2035 projection)
Trucks: 13.2%
Truck AADT: 13,800

State Highway/mainline AADT, % trucks, truck AADT (RTP horizon year)

2035 Build Condition	2035 No Build Condition
AADT: 205,000	AADT: 215,000
Trucks: 13.2%	Trucks: 13.2%
Truck AADT: 27,160	Truck AADT: 28,400

If interchange(s) or intersection(s) involved, for worst-LOS interchange or intersection:

Cross-street AADT, % trucks, truck AADT (opening year) (with project)

Nason Street: AADT: 18,700 Trucks 4% Truck AADT: 750
Moreno Beach Drive AADT: 15.400 Trucks 4% Truck AADT: 620

Cross-street AADT, % trucks, truck AADT (RTP horizon year) (with project)

Nason Street: AADT: 35,800 Trucks 4% Truck AADT: 1,400 (horizon year 2035)
Moreno Beach Drive AADT: 41,100 Trucks 4% Truck AADT: 1,600 (horizon year, 2035)

Comments/Explanation/Details
See the memorandum attached to this form for additional traffic and Air Quality information.

The Oct. 2006 RTIP be amended to show a "revised" project description with 6 lanes on Moreno Beach Drive, and 4 lanes on Nason Street OC. The project is currently being modeled by SCAG with this updated lane configuration at both bridges. The Model number will be posted on the SCAG web site by June 30, 2006. At Nason Street overcrossing (4-through lanes) and at Moreno Beach Drive (6-through lanes). The project limits were revised to be PM 17.9/19.8 during the preliminary environmental phase and have been updated in the Draft 2006 RTIP.

REFERENCE:
Criteria for projects of air quality concern (40 CFR 93.123(b)(1)) – PM_{10} and $PM_{2.5}$ hot spots

(i) *New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;*

(ii) *Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related ot he project;*

(iii) *New bus and rail terminals and transfer points than have a significant number of diesel vehicles congregating at a single location;*

(iv) *Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and*

(v) *Projects in or affecting locations, areas, or categories of sites which are identified in the PM10 or PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.*

MEMORANDUM

June 13, 2006

To: Dave Speirs

From: Shudeish Mahadev

Subject: PM2.5 Hot Spot Analysis for SR-60/Moreno Beach Drive Interchange

The United States EPA promulgated NAAQS for $PM_{2.5}$ (along with revised NAAQS for ozone) on July 18, 1997 to complement the existing NAAQS for PM_{10}. These standards were challenged by a number of business and industry groups, but were upheld by the U.S Supreme Court and the District of Columbia Court of Appeals. EPA then published their final rule on $PM_{2.5}$ designations and classifications in the Federal Register on January 5, 2005, and established boundaries for areas designated as nonattainment, unclassifiable or attainment/classifiable. The SCAB was designated as a nonattainment area for $PM_{2.5}$, which became effective on April 5, 2005.

While recognizing that highway projects that involve significant amount of traffic and diesel vehicles contribute to particulate matter (both $PM_{2.5}$ and PM_{10}) degradation, and to ensure conformity of these projects with efforts to attain the NAAQS, EPA published a final rule on March 10, 2006 (officially effective as of April 3, 2006), that established conformity criteria and procedures for transportation projects to determine their impacts on ambient $PM_{2.5}$ and PM_{10} levels in nonattainment and maintenance areas. The "Transportation Conformity Guidance for Qualitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas" provides guidance on qualitative analyses for these two criteria pollutants. The $PM_{2.5}$ hot-spot analysis must meet the requirements of this rule, while the PM_{10} analysis can meet the requirements of this rule or the previous FHWA's Sept 12, 2001 "Guidance for Qualitative Project-Level 'Hot-Spot' Analysis in PM_{10} Nonattainment and Maintenance Areas". Both of these requirements are in compliance with the transportation conformity rule (40 CFR 51.390 and Part 93), which establishes the criteria and procedures for determining whether transportation activities conform to the state air quality implementation plan (SIP).

The rule requires a Project of Air Quality Concern (POAQC), defined in 93.123(b)(i) to 93.123(b)(v) to conduct a $PM_{2.5}$ and PM_{10} hot-spot analysis. POAQC under the definition of 93.123(b)(i) are; "new or expanded highway projects that have a significant number of or significant increase in diesel vehicles". According to the preamble to the rule, an example of a POAQC that would be covered by 93.123(b)(i) is a "project on a new highway or expressway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic".

The projected ADT for the project for year 2035 under the no build alternative is 215,000 on SR-60, and 205,000 under the build condition. The reduced mainline volume is due to the redistribution of some local traffic between Nason Street and Moreno Beach Drive to Eucalyptus Avenue, a parallel local arterial that can be connected to Moreno Beach Drive under the "build" condition. (See Attachments following page 7 of this memo for figures 11 and 18 from the March 13, 2006 Traffic study. These

figures illustrate the connection of Eucalyptus Avenue to Moreno Beach Drive under the Build Conditon). See Table 2 for additional "build" and "no-build" traffic projections. Based upon existing traffic data, the current percentage of diesel truck traffic for the SR-60 mainline is 13.2% (Caltrans count) and 4% (City count) on the arterial system. In accordance with the City of Moreno Valley General Plan, the proposed land-use in the vicinity of the project is primarily residential with some commercial. Based upon this land-use the percentage of diesel truck traffic is anticipated to remain unchanged and therefore, this project is believed to qualify as "Not a POAQC" and a PM2.5 and PM10 hot-spot analysis would not be required.

Table 1 shows that the project area is in a non-attainment area for $PM_{2.5}$ (also see CARB, 2005a). The CARB (2005a) report, as shown in Figure 1, also presents data for the annual average composition of $PM_{2.5}$ that was measured at Rubidoux (27.9 $\mu g/m^3$), approximately 8 miles west of the project area; ammonium nitrate (from combustion)- 46%, ammonium sulfate (from combustion)- 13%, elemental carbon (from combustion)- 4%, organic carbon (from combustion)- 31%, road and other dust- 4%, and other- 2%. As can be discerned from this data, combustion sources contribute predominantly to the measured $PM_{2.5}$ in the project area, with most of the contribution likely from automobiles, and a small contribution from road dust.

Although the project is already located in an area that is in nonattainment, and with combustion sources contributing predominantly to the nonattainment status, the discussion below will demonstrate that the project is not expected to cause further degradation of ambient $PM_{2.5}$ concentrations. Conversely, the project will most likely ameliorate air quality in the local project area by reducing congestion and improving traffic flow in the project area, and thus reducing the contribution to $PM_{2.5}$ degradation from automobiles. The following indicators demonstrate that traffic conditions on SR-60 will be improved between the build and no build alternatives for year 2035; decrease in total ADT (Table 2), improvement in LOS (Table 3), and decrease in queue length (Table 4). Additionally, the percentage of diesel trucks in the vehicle mix on the freeway and on the local streets is expected to remain the unchanged because the areas served by the intersections are primarily residential.

Moreover, EPA and CARB programs to target combustion sources and reduce particulate emissions will cause overall $PM_{2.5}$ concentrations to decline significantly. Some of the programs already in effect or under consideration are: diesel particulate risk management, regional haze, ground level ozone control, and smoke management (CARB, 2003). These programs will both reduce the background level of $PM_{2.5}$ all over the region and the state, as well as reduce $PM_{2.5}$ emissions from this project.

Table 1
Air Pollutant Data Summary from Perris, Rubidoux and Magnolia Monitoring Stations (2002-2005)[3]

Pollutant	CARB Monitoring Station Data		
	2003 (2002)	2004 (2003)	2005 (2004)
Ozone (O_3)			
Highest 1 hour, ppm	0.155	0.128	0.126
Days > 0.12 ppm[1]	7	2	1
Days > 0.09 ppm[2]	67	36	11
Highest 8 hour, ppm	0.121	0.104	0.103
Days > 0.08 ppm[1]	46	20	3
Carbon Monoxide (CO)			
Highest 1 hour, ppm	(8.0)	(5.0)	(4.0)
Days > 35.0 ppm[1]	0	0	0
Days > 20.0 ppm[2]	0	0	0
Highest 8 hour, ppm	3.67	2.97	2.13
Days > 9.0 ppm[1,2]	0	0	0
Nitrogen Dioxide (NO_2)			
Highest 1 hour, ppm	0.099	0.092	0.069
Days > 0.25 ppm[2]	0	0	0
Annual Average	(0.023)	(0.021)	(0.017)
Annual Standard Exceeded?	No	No	No
Sulfur Dioxide (SO_2)			
Highest 24 hour, ppm	0.012	0.015	0.011
Days > 0.14 ppm[1]	0	0	0
Days > 0.25 ppm[2]	0	0	0
Annual Average	0.002	0.003	0.004
Annual Standard Exceeded?	No	No	No
Particulates (PM_{10})			
Highest 24 hour	142.0	83.0	39.0
Days > 150 $\mu g/m^3$ [1]	0	0	0
Days > 50 $\mu g/m^3$ [2]	17	15	0
Annual Average	(45.1)	(43.9)	(41.4)
National Annual Standard Exceeded?	No	No	No
State Annual Standard Exceeded?	Yes	Yes	Yes
Particulates ($PM_{2.5}$)			
Highest 24 hour	104.3	93.8	63.1
National 24-Hr Standard Exceeded? ($> 65 \mu g/m^3$ [1])	Yes	Yes	Yes
Annual Average	(27.1)	(22.6)	(20.8)
National Annual Standard Exceeded? ($> 15 \mu g/m^3$ [1])	Yes	Yes	Yes
State Annual Standard Exceeded? ($> 12 \mu g/m^3$ [2])	Yes	Yes	Yes
Lead (Pb)	No Data	No Data	No Data

Ppm – parts per million
$\mu g/m^3$ – micrograms per cubic meter
NM – Not measured at this station
AAM – Annual Arithmetic Mean
AGM – Annual Geometric Mean
[1]Federal Standard
[2]State Standard
[3]Numbers in parenthesis represent monitoring data from years 2002 to 2004.

Table 2

ADT for the Project Study Area For Year 2035

ALL Vehicles						TRUCKS *		
Roadway Segment			Length	Year 2035		Truck %	Year 2035	
Roadway	from	To	Miles	No Build	Build	*	No Build	Build
SR-60	West project limit (PM 17.9)	Nason St (PM 18.4)	0.468	212,889	211,662	13.2%	28,100	27,900
	Nason St (PM 18.4)	Moreno Beach Dr (PM 19.1)	0.75	215,467	204,708	13.2%	28,400	27,000
	Moreno Beach Dr (PM 19.1)	east project limit (PM 19.8)	0.682	189,528	191,200	13.2%	25,000	25,200
Nason	Ironwood Ave	SR-60 Westbound Ramps	0.398	13,769	10,801	4.0%	600	400
	SR-60 Westbound Ramps	New SR-60 Eastbound Ramps	0.166	33,103	25,102	4.0%	1,300	1,000
	New SR-60 Eastbound Ramps	Old SR-60 Eastbound Ramps	0.105	49,110	35,834	4.0%	2,000	1,400
	SR-60 Eastbound Ramps	Fir Ave	0.107	49,110	35,834	4.0%	2,000	1,400
Moreno Beach	Ironwood Ave	SR-60 Westbound Ramps	0.359	16,886	21,271	4.0%	700	900
	SR-60 Westbound Ramps	SR-60 Eastbound Ramps	0.182	32,477	41,056	4.0%	1,300	1,600
	SR-60 Eastbound Ramps	Eucalyptus Ave	0.089	32,477	49,651	4.0%	1,300	2,000
	Eucalyptus Ave	Auto Mall Dr	0.337	36,655	36,461	4.0%	1,500	1,500
Eucalyptus	Nason St	Moreno Beach Dr	0.924	7,744	23,720	4.0%	300	900

(Source for Traffic Volumes: Urban Crossroads Traffic Forecasts Report dated 1-10-2006)

1. Mainline traffic volumes on SR-60 will decrease for "build" condition (versus the "no-build" condition) due to relocation of EB off/on ramp intersection at Eucalyptus Ave/Moreno Beach Dr. which would allow the connection of east-west parallel arterial road (Eucalyptus Avenue) See Attached Figures (with and without project)
   The projected traffic volumes on Nason Street for the "build" will decrease versus the "no build" condition due to the completion Eucalyptus Aveune, resulting in some redistribution of local traffic to Moreno Beach Drive. Conversly, the "build" condition will increase the traffic volumes on Moreno Beach Dr versus the "build" condition due the completion of Eucalyptus Ave.
2. The truck percentages for SR-60 are estimated at 13.2 percent based upon Caltrans 2004 counts at Post Mile 12.2," East Junction I-215", and at Post Mile 22.1 "Gilman Springs Road"
3. The truck percentages on SR60 are expected to remain the same for year 2035 as current conditions since the landuse per the City General Plan for project vicinity and easterly along SR60 is primarily residential.

Table 3
LOS For the Project Study Area For Year 2035

Location	No Build Peak Hour		Build Peak Hour	
	AM	PM	AM	PM
Nason St @ WB SR-60 Ramps	C	C	B	B
Nason St @ SR-60 EB Ramps	C	C	B	B
Nason St @ Eucalyptus Ave	D	D	C	C
Moreno Beach Dr @ Ironwood	D	D	C	C
Moreno Beach Dr @ SR-60 WB Ramps	C	C	B	B
Moreno Beach Dr @ EB Ramps	F	F	B	B
Moreno Beach Dr @ Eucalyptus			B	C
Moreno Beach Dr @ Auto Mall Dr	A	A	A	A

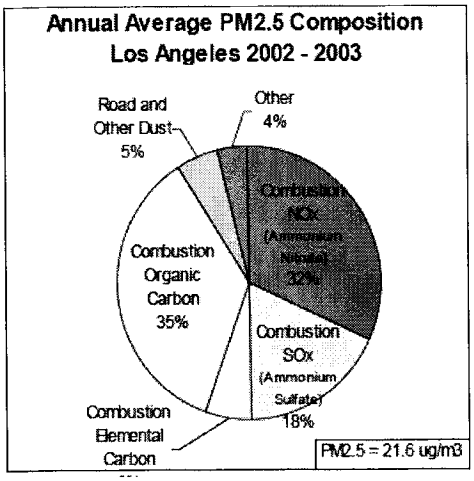
Table 4
Total Queue Lengths For the Project Study Area For Year 2035

Location	Eastbound		Westbound		Northbound		Southbound	
	No Build	Build	No Build	Build	No Build	Build	No Build	Build
Nason St / WB SR-60 Ramps	199	126	252	114	352	109	368	186
Nason St / SR-60 EB Ramps	556	232			726	421	1353	110
Nason St / Eucalyptus Ave	634	249	213	312	632	429	747	416
Moreno Beach Dr / Ironwood	352	304	583	344	330	132	524	287
Moreno Beach Dr/SR-60 WB Ramps			686	237	147	477	499	129
Moreno Beach Dr / EB Ramps	1558	426	341		944	173	593	273
Moreno Beach Dr / Eucalyptus		316		295		304		313
Moreno Beach Dr/Auto Mall Dr			86	36	104	172	12	169

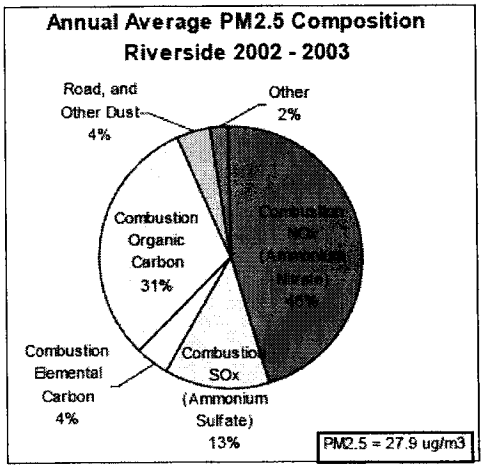
Figure 1
Annual Average Composition Measured at Rubidoux, Years 2002-2003

Figure O-4. Annual Average Composition of PM2.5 and Link to Emission Source type.

a) Los Angeles



b) Riverside



South Coast Air Basin II-O-6

ATTACHMENTS:

The following paged contain

Figures 11 and 18

From

Draft Traffic Study

Dated: March 13, 2006

By Parsons

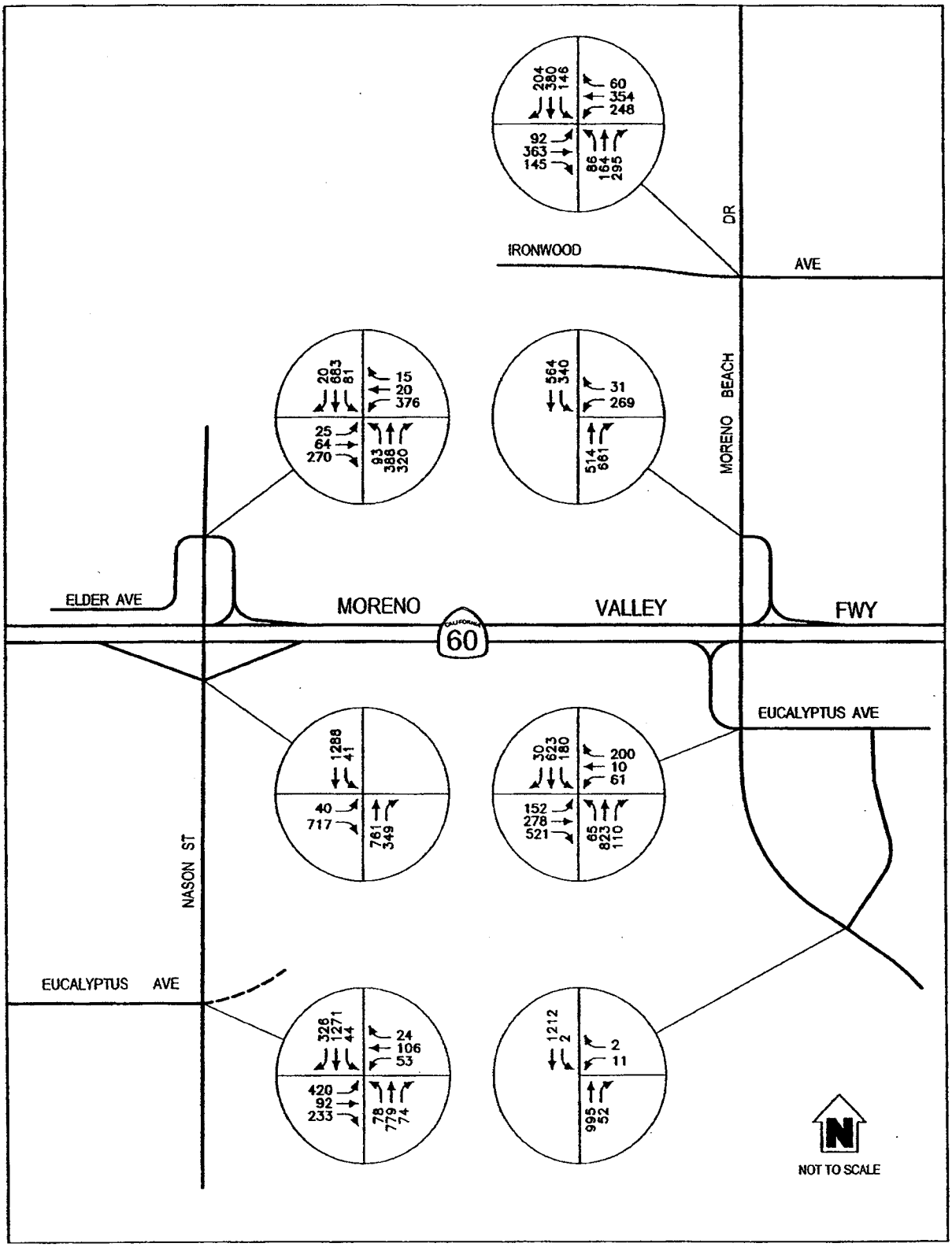


Figure 11. No Build Condition Year 2035 AM Peak Hour Intersection Turning Counts

078

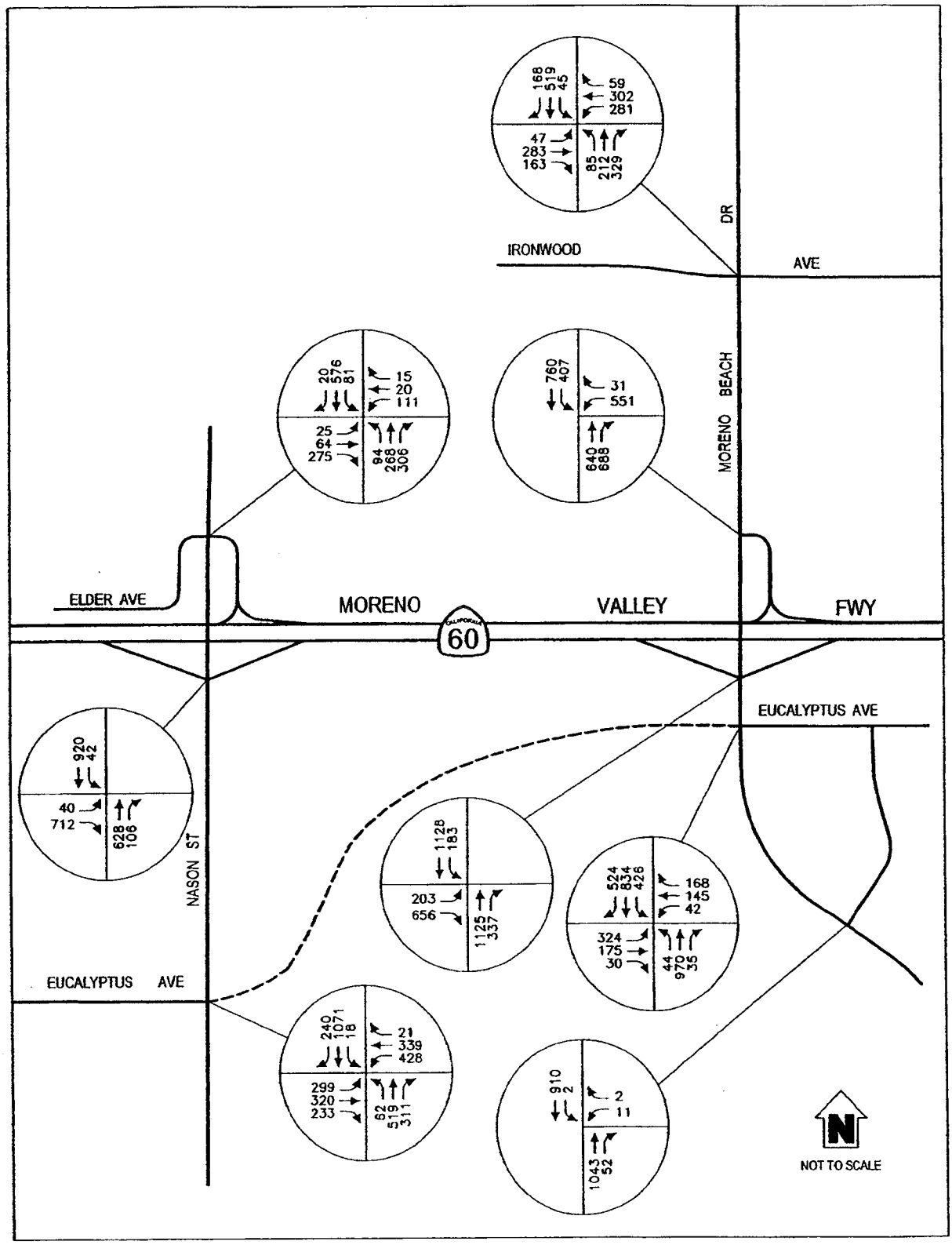
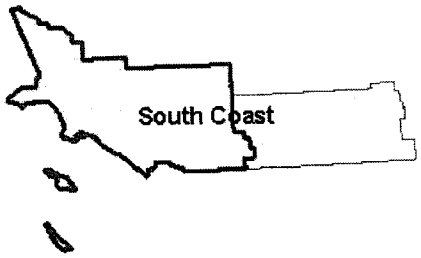


Figure 18. Build Condition Year 2035 AM Peak Hour Intersection Turning Counts

O. South Coast Air Basin (South Coast AQMD)



The South Coast Air Basin is comprised of a single air district, the South Coast AQMD, and consists of Orange County, the western portion of Los Angeles County, the southwestern portion of San Bernardino County, and the western portion of Riverside County. The entire air basin currently exceeds both the 24-hour and the annual State PM10 standards, as well as the national 24-hour and annual PM10 standards The air basin also exceeds the State annual PM2.5 and the national 24-hour and annual PM2.5 standards.

Figure O-1 shows the PM10 (a) and PM2.5 (b) monitoring site locations throughout the South Coast Air Basin.

Figure O-1. PM10 and PM2.5 Monitoring Sites throughout the Air Basin.

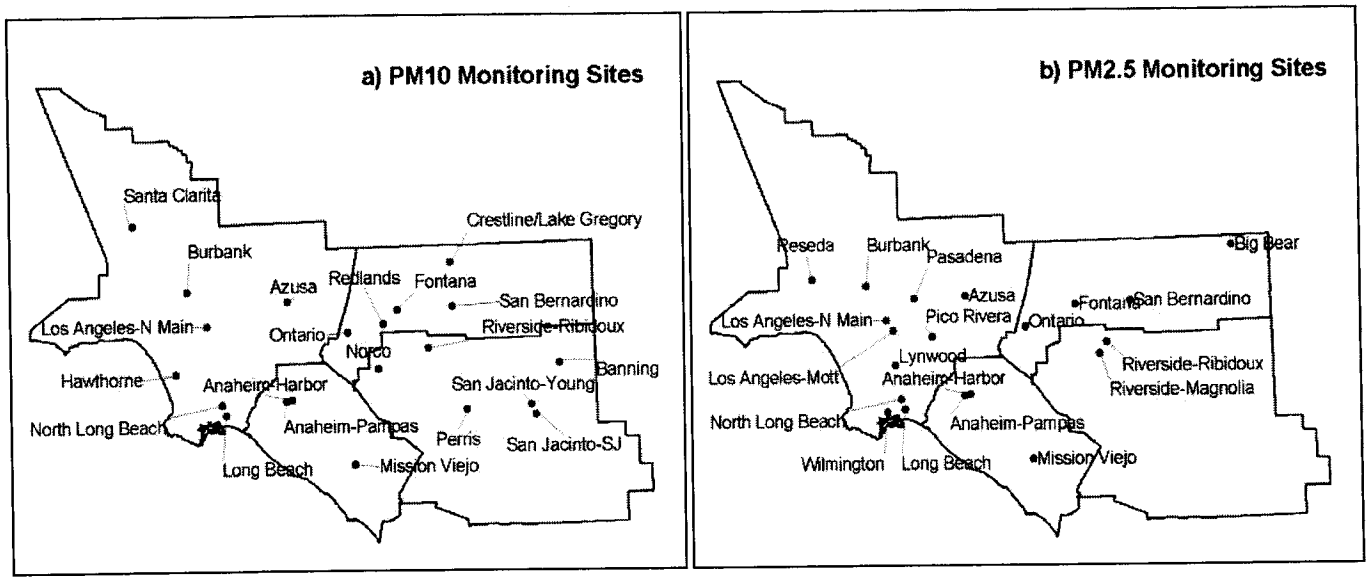


Table O-1 provides information on yearly variations in the highest PM10 and PM2.5 concentrations recorded across the South Coast AQMD in 2001 through 2003. During this period, we estimate that particulate levels exceeded the State 24-hour PM10 standard of 50 $\mu g/m^3$ seven hundred and two times. PM10 levels consistently exceeded the State 24-hour standard of 50 $\mu g/m^3$ and the annual standard of 20 $\mu g/m^3$. PM10 levels also exceeded the national 24-hour standard of 150 $\mu g/m^3$ and the annual standard of 50 $\mu g/m^3$. PM2.5 levels exceeded the State annual standard of 12 $\mu g/m^3$, the national 24-hour standard of 65 $\mu g/m^3$, and the national annual standard of 15 $\mu g/m^3$.

Table O-1. PM10 and PM2.5 Air Quality in the South Coast AQMD.

Year	PM10 (ug/m^3)			PM2.5 (ug/m^3)	
	Calculated Days over State Std.	Max 24-hour (Std.=50)	Max Annual Average (Std.=20)	Max 24-hour*	Max Annual Average (Std.=12)
2001	240	219**	63	104	25
2002	251	130	58	82	26
2003	211	164**	57	121**	25

* The maximum 24-hour PM2.5 values are provided for information only.
**These values were excluded for determining attainment status. See text.

Table O-2 provides the 24-hour and annual designation values for the State standards for the 2001-2003 period. Designation values represent the highest 24-hour PM10 concentration measured during the three year period, after concentrations measured during highly irregular and infrequent events have been excluded, and the highest estimated PM10 and PM2.5 annual average in the same period. For example, the high 24-hour PM10 concentration in 2001 shown in Table O-1 was identified as an extreme concentration event, and the high 24-hour PM10 and PM2.5 concentrations in 2003 were due to wildfires. These values were therefore excluded in determining the designation values shown in Table O-2. The designation values are determined for each site, and the highest site is used for determining an area's designation. Based on these data, the South Coast AQMD currently is nonattainment for both the State 24-hour and annual average PM10 standards. The District is also designated as nonattainment for the State annual PM2.5 standard.

Table O-2. Air District Level Designation Values* for the State PM10 and PM2.5 Standards (2001-2003 Period).

	PM10 (ug/m^3)		PM2.5 (ug/m^3)
	24-Hour (Std.=50)	Annual Average (Std.=20)	Annual Average (Std.=12)
Designation Value	120	63	26

* Designation value is the value used for determining attainment status. It is the highest measured value over three years after excluding highly irregular or infrequent events.

Table O-3 provides designation values for each monitoring site in the air district to provide further information on the geographic distribution of concentrations. Particulate levels exceeded both State PM10 standards as well as the annual PM2.5 standard consistently across the air district. Highest concentrations occurred at Riverside, Norco, Perris, Ontario, and San Bernadino in the eastern portion of the air basin.

Table O-3. Monitoring Site Level Designation Values* for the State PM10 and PM2.5 Standards (2001-2003 Period).

Site	PM10 (ug/m^3)		PM2.5 (ug/m^3)
	24-Hour (Std.=50)	Annual Average (Std.=20)	Annual Average (Std.=12)
Azusa	106	44	Incomplete Data
Burbank	86	41	25
Hawthorne	75	37	No Monitor
Los Angeles-Mott	No Monitor	No Monitor	Incomplete Data
Long Beach	75	Incomplete Data	Incomplete Data
Los Angeles North Main	97	44	Incomplete Data
Lynwood	No Monitor	No Monitor	24
North Long Beach	74	37	20
Santa Clarita	72	33	
Pasadena	No Monitor	No Monitor	20
Pico Rivera	No Monitor	No Monitor	Incomplete Data
Reseda	No Monitor	No Monitor	19
Wilmington	No Monitor	No Monitor	Incomplete Data
Anaheim	96	34	Incomplete Data
Mission Viejo	64	31	15
Banning	79	29	No Monitor
Norco	109	40	No Monitor
Perris	116	45	No Monitor
Riverside-Magnolia	No Monitor	No Monitor	23
Riverside-Rubidoux	136	63	25
San Jacinto	Incomplete Data	Incomplete Data	No Monitor
Big Bear	No Monitor	No Monitor	Incomplete Data
Fontana	106	50	25
Lake Gregory	74	Incomplete Data	No Monitor
Ontario	120	52	24
Redlands	102	Incomplete Data	No Monitor
San Bernardino	106	52	26

* Designation value is the value used for determining attainment status. It is the highest measured value over three years after excluding highly irregular or infrequent events.

Figure O-2 illustrates variation in PM10 and PM2.5 levels throughout 2002 at North Long Beach (a); Mission Viejo (b); Burbank (c); Los Angeles (d); Riverside-Rubidoux (e); and San Bernardino (f). The total height of the bars represents PM10 concentrations, while the height of the black portion of the bars represents the PM2.5 fraction. PM10 and PM2.5 levels recorded at monitoring sites in the western part of the district show a slightly seasonal pattern. For example, PM10 and PM2.5 concentrations were highest during the November through February period at Long Beach (a) and Mission Viejo (b). Moving eastward, at Burbank (c) and Downtown Los Angeles (d) the seasonal variation in PM levels becomes less pronounced, but higher PM10 and PM2.5 levels were still recorded during the winter and spring at both sites, with high PM10 levels also occurring in the fall at Los Angeles. At the Riverside (e) and San Bernardino (f) monitoring sites located in the eastern portion of the air district, both PM10 and PM2.5 exhibit no distinct seasonal pattern.

Figure O-2 (a-d). Seasonal Variation in PM10 and PM2.5 Concentrations.

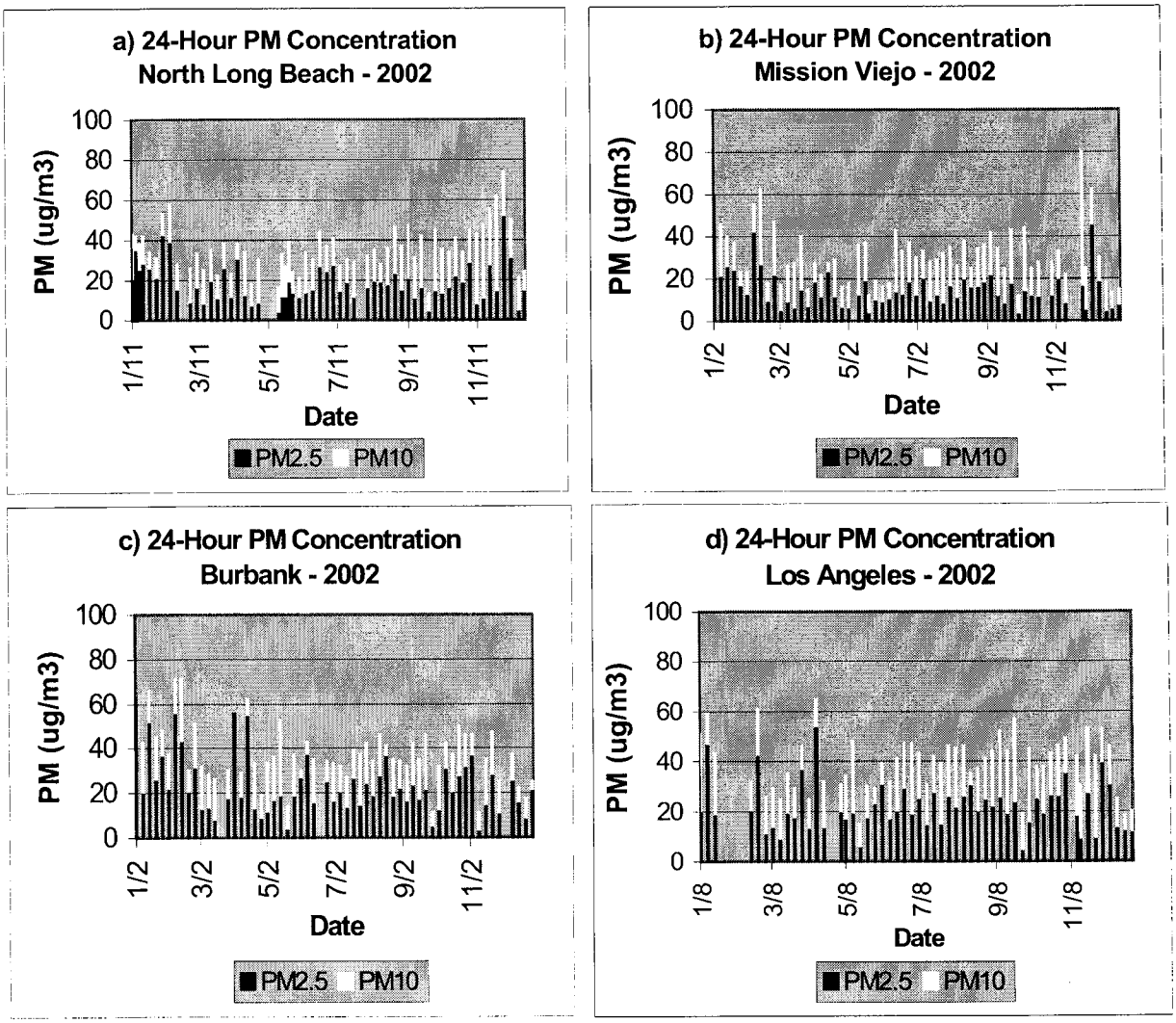
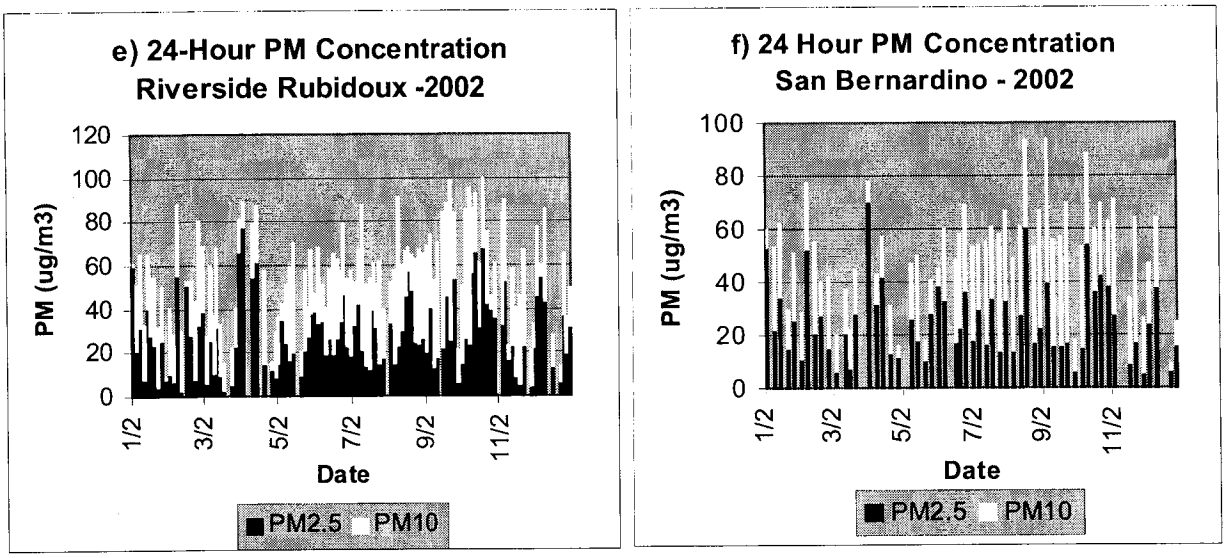


Figure O-2 (e-f). Seasonal Variation in PM10 and PM2.5 Concentrations.



On an annual average, based on 2000-2003 monitoring data throughout the air district, we estimate that PM2.5 comprises approximately 52 percent of PM10, with a higher PM2.5 fraction at Burbank (61 percent) and Los Angeles (56 percent) and a lower fraction at Riverside-Rubidoux (47 percent).

Figure O-3 (a). Hourly Variation in PM2.5 Concentrations.

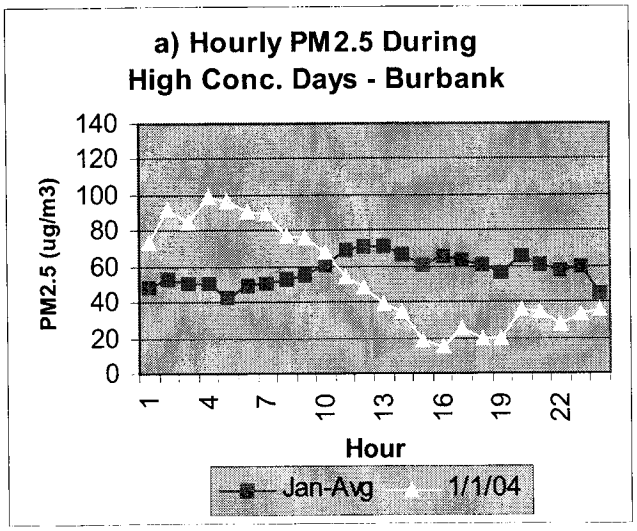
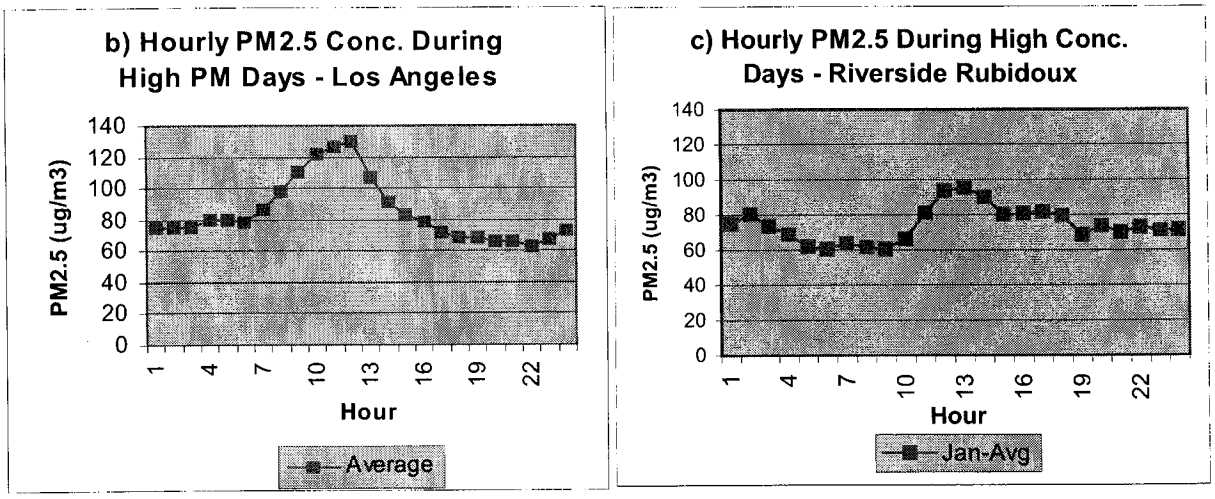


Figure O-3 presents the average hourly variation in PM2.5 levels at Burbank (a), Los Angeles (b), and Riverside-Rubidoux (c) for the days within the year with the highest PM2.5 concentrations. In January, the hourly variation pattern in PM2.5 levels is similar at Burbank and Riverside, although more pronounced at Riverside. Peak PM2.5 concentrations occur from mid-morning through the evening. At Los Angeles, a narrower peak of PM2.5 levels occurred at mid-day. Broad mid-day peaks in PM2.5 levels can often reflect the influence of daytime secondary PM formation. On New Years Day at Burbank, PM2.5 levels were highest at nighttime and may reflect increased residential wood combustion activity.

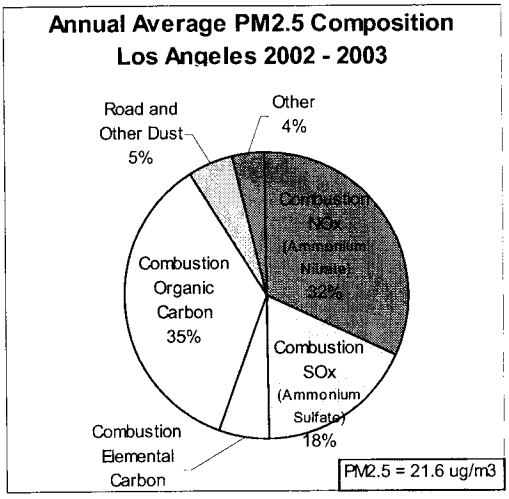
Figure O-3 (b and c). Hourly Variation in PM2.5 Concentrations.



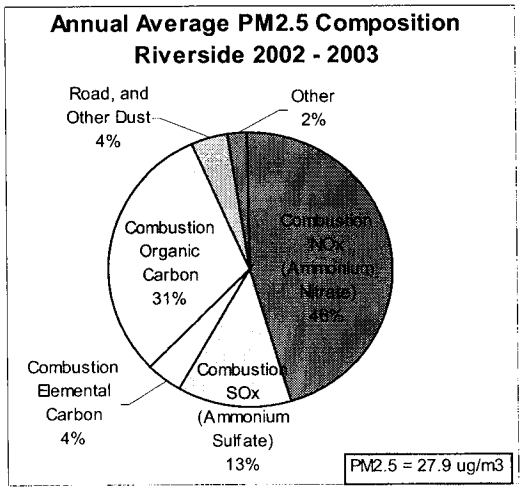
Data for Figures O-4, O-5, and O-6 are from analysis of ambient PM2.5 data collected at Los Angeles and Riverside-Rubidoux from the State's PM2.5 speciation network. Chemical components have been associated with possible emission sources based on emission inventory information. On an annual average basis the major components of PM2.5 are ammonium nitrate (30 to 45 percent) and organic carbon (30 to 35 percent). Ammonium nitrate is formed in the atmosphere from chemical reactions of NOx from vehicle exhaust and stationary combustion sources. The majority of organic carbon is suspected to be due to directly emitted carbon from combustion sources. Key sources include vehicles, agricultural and prescribed burning, residential wood combustion, and stationary combustion sources. However, a fraction may be due to secondary organic aerosol formation from anthropogenic and biogenic VOC.

Figure O-4. Annual Average Composition of PM2.5 and Link to Emission Source type.

a) Los Angeles



b) Riverside



The ammonium nitrate component is higher in Riverside than in Los Angeles. Ammonium sulfate - formed in the atmosphere from chemical reactions of SOx from mobile and stationary combustion sources - also contributes significantly to ambient PM2.5. Dust from roads and other dust producing activities and elemental carbon from combustion processes contribute to a lesser extent.

Figures O-5 and O-6 illustrate the quarterly variation in PM2.5 levels and its chemical components expressed in $\mu g/m^3$ (a) and as percent of PM2.5 (b) at Los Angeles and at Riverside based on 2002-2003 monitoring data. As in the previous figures, chemical components have been associated with possible emission sources based on emission inventory information. At Los Angeles (Figure O-5), higher PM2.5 concentrations occurred during the 3rd and 4th quarters. During the 3rd quarter, an increase in the ammonium sulfate component caused elevated PM2.5 levels, while during the 4th quarter, the organic carbon component was higher than on the 3rd quarter. At Riverside (Figure O-6), higher PM2.5 levels occurred during the spring, summer, and fall quarters. As was the case in Los Angeles, during the spring and summer, an increase in the ammonium sulfate component caused elevated PM2.5 levels, while during the fall the organic carbon component was higher. Sunnier, warmer conditions during the spring and summer favor the formation of ammonium sulfate. The ammonium nitrate contribution to ambient PM2.5 does not change much on a seasonal basis, but is significant throughout the year.

Figure O-5 (a). Average Quarterly Chemical Composition of PM2.5 and Link to Emission Source Type.

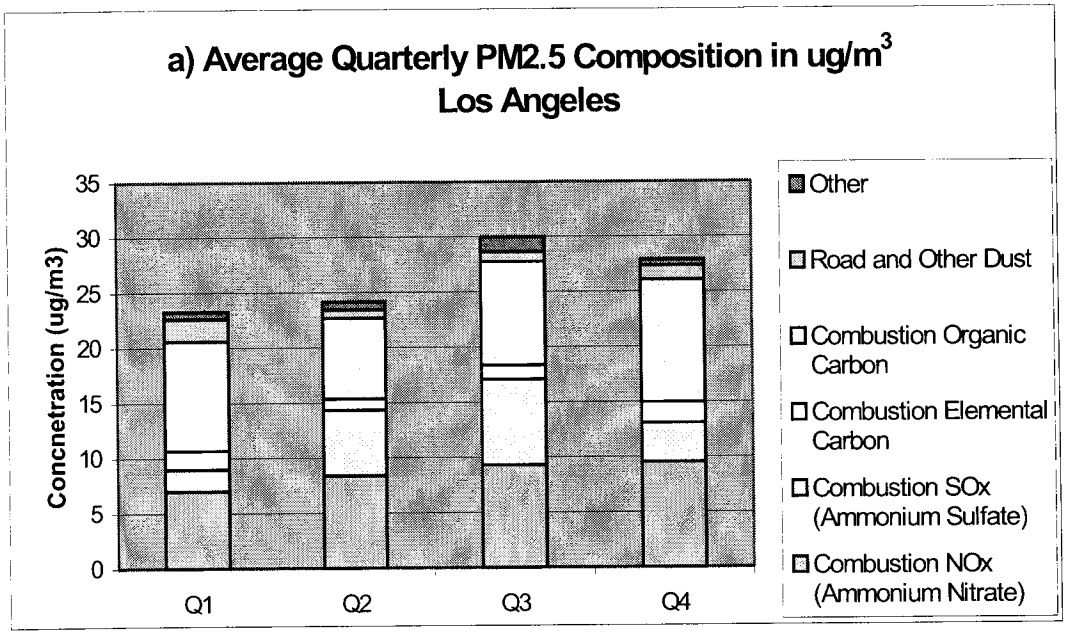


Figure O-5 (b). Average Quarterly Chemical Composition of PM2.5 and Link to Emission Source Type.

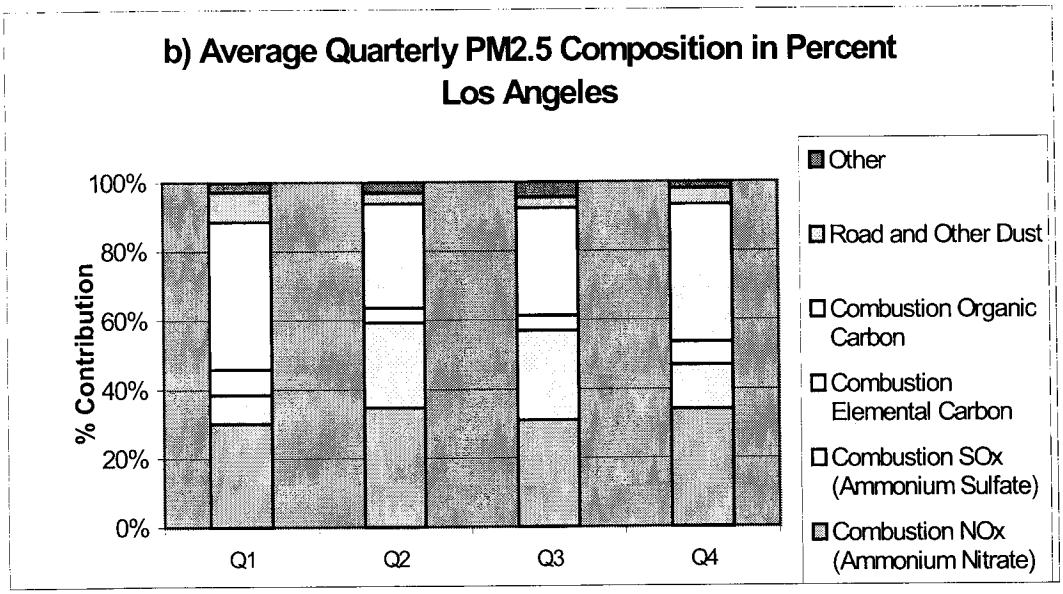


Figure O-6 (a). Average Quarterly Chemical Composition of PM2.5 and Link to Emission Source Type.

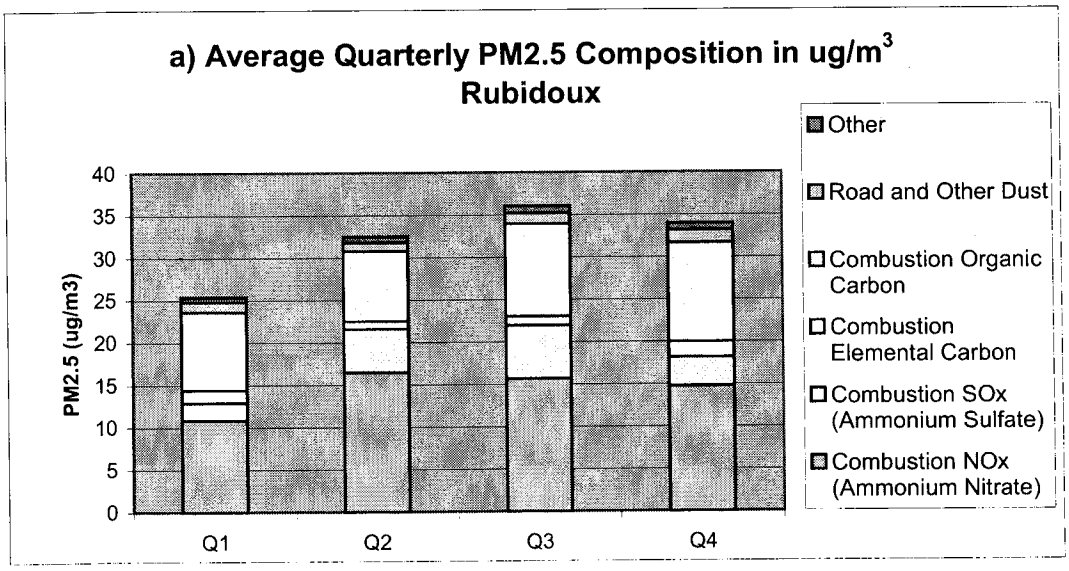


Figure O-6 (b). Average Quarterly Chemical Composition of PM2.5 and Link to Emission Source Type.

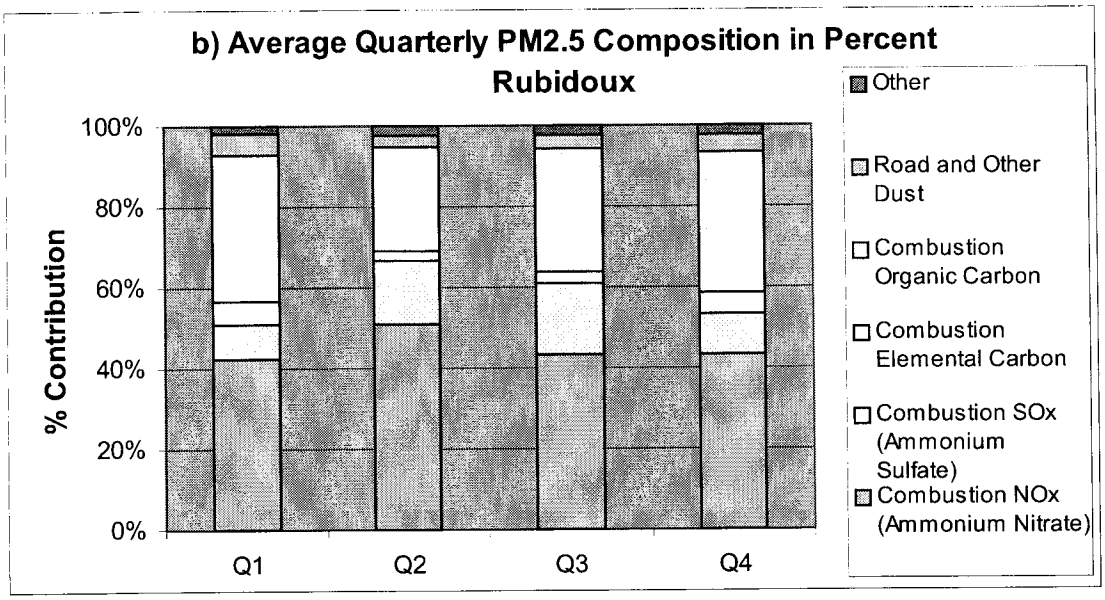
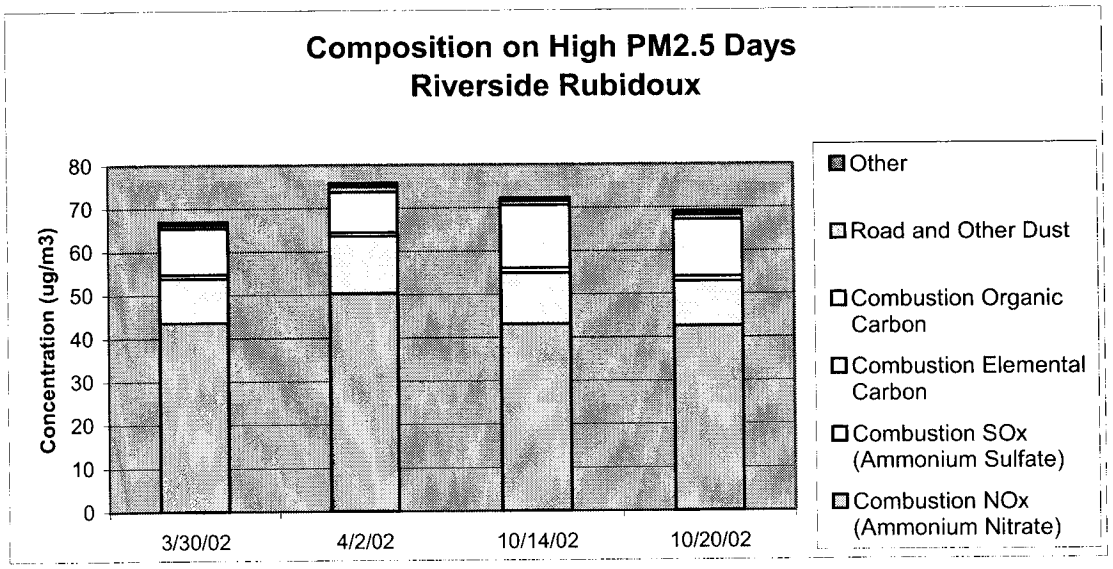


Figure O-7 presents the chemical composition of PM2.5 and associated emission sources on days when PM2.5 levels exceeded 50 $\mu g/m^3$ during the spring and winter at Riverside. On all four days days, the major component of ambient PM2.5 is ammonium nitrate, contributing approximately 60 percent to PM2.5. Organic carbon and ammonium sulfate also contribute significantly to PM2.5. Organic carbon is a slightly higher contributor during the October days as compared to the March and April days.

Figure O-7. Chemical Composition of PM2.5 on High Concentration Days.



Figures O-8 and O-9 present the results of a chemical mass balance modeling performed using ambient PM10 data collected at Central Los Angeles (a) and Riverside (b) during a one-year study conducted from January 1995 to February 1996 as part of the PM10 Technical Enhancement Program (PTEP) (SCAQMD. 1996). The chemical mass balance modeling provides further resolution on the sources of organic and elemental carbon. Figure O-8 shows that on an annual average basis ammonium nitrate contributes most significantly to PM10. Directly emitted particles from vehicle exhaust are also a major contributor. Road dust and dust from other sources is another major contributor to ambient PM10, but not to the PM2.5 fraction. Figure O-9 shows the results for November 17, 1995, when maximum PM10 levels were recorded. On peak days, ammonium nitrate increases, and becomes the major contributor to ambient PM10 levels at both sites (approximately 50 to 55 percent). Directly emitted particles from vehicle exhaust, and ammonium sulfate also contribute approximately 5 to 10 percent. Colder, more stagnant conditions during this time of the year are conducive to the buildup of ammonium nitrate.

Figure O-8. Source Apportionment of Annual Average PM10 Using Chemical Mass Balance.

a) Los Angeles **b) Riverside**

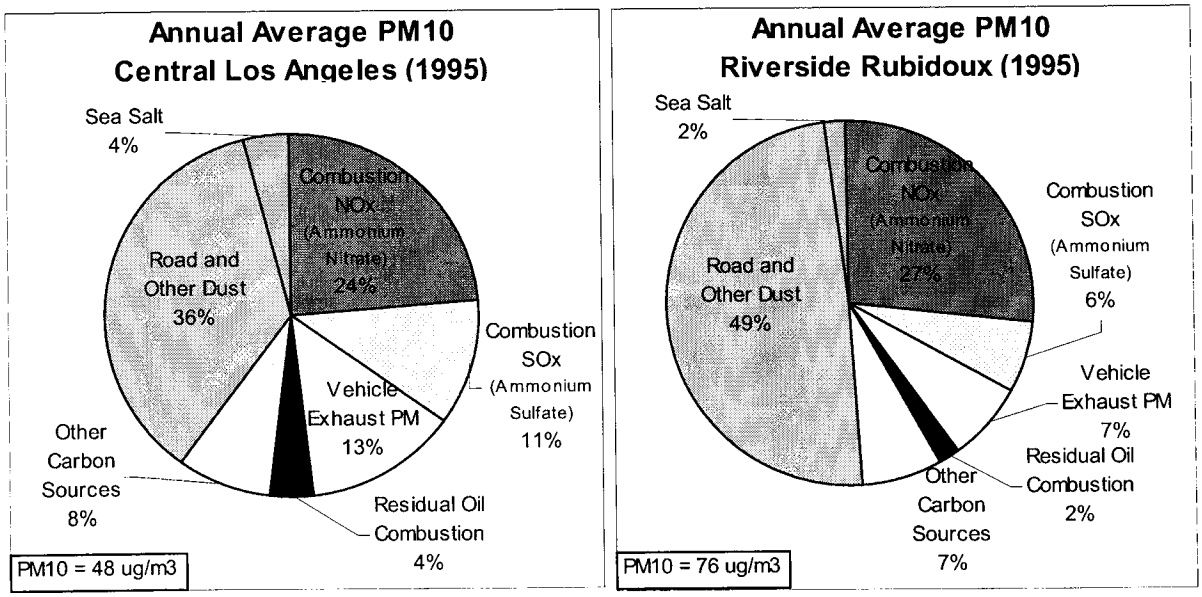
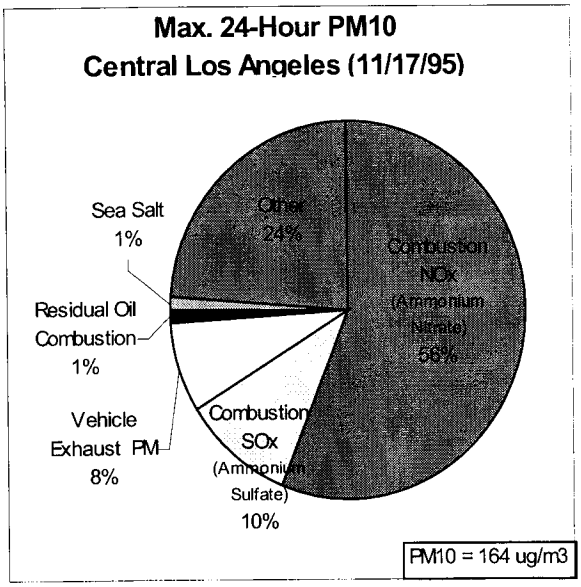
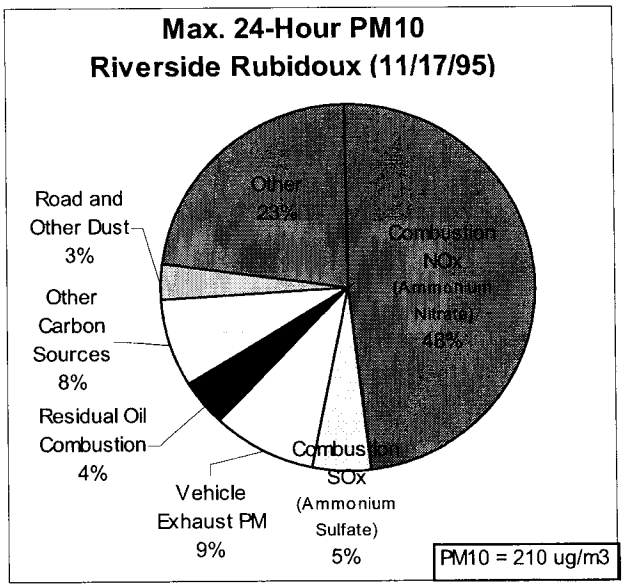


Figure O-9. Source Apportionment of PM10 on the Maximum Concentration Day in 1995 Using Chemical Mass Balance.

a) Los Angeles



b) Riverside



PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

Project Description *from TIP, RTP, and/or project documents* **MPO ID#:** SBD031290

Bridge and roadway improvements to Mountain View Avenue between Van Leuven Street and Prospect Avenue. The improvements will include bridge rehabilitation, widening and seismic retrofit. The bridges cross the Union Pacific Railroad (UPRR) and San Timoteo Channel.

Type of project *see list below*

Change to existing regionally significant street

County:	**Narrative Location/Route & Postmiles:** Mountain View Avenue between Van Leuven Street and Prospect Avenue.
San Bernardino	**Caltrans Projects – EA#:** 08-924967

Lead Agency: City of Loma Linda

Contact Person		**Fax#**	**Email**
T. Jarb Thaipejr	(909) 799-4401	(909) 799-2891	jthaipejr@lomalinda-ca.gov

Decision Desired *Check appropriate box below*

PM2.5		**MAYBE Project of Air Quality Concern**	X	**NOT Project of Air Quality Concern**
PM10		**MAYBE Project of Air Quality Concern**	X	**NOT Project of Air Quality Concern**

Federal Action for which PM Analysis is Needed *Check appropriate box and describe in Comments below*

	CE		**EA or Draft EIS**		**FONSI or Final EIS**	X	**Construction**		**Other**

Scheduled Date of Federal Action: Funds must be obligated as soon as possible

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start				2006
End	complete	complete	complete	2007

Project Purpose and Need (Summary): *Attach additional sheets as necessary*

The improvements will mitigate an existing traffic bottleneck condition proceeding northerly on Mountain View Avenue from Prospect Avenue. This will complete a missing link, providing 4 lanes, 2 each direction, on Mountain View Avenue. The project will reduce existing traffic congestion on Mountain View Avenue during AM and PM peak hours.

Surrounding Land Use/Traffic Generators

Adjacent to the project on the west is a city park (baseball fields), east is vacant land, the bridges cross a flood control channel and a railroad. This main north-south arterial connects the I-10 freeway to the employment centers of the Veterans Memorial Hospital, commercial areas and Civic Center. Immediately north of the project is a church and multi-family housing and to the south is multi-family housing, a mini-storage facility, a church and commercial center.

LOS, AADT, % trucks, truck AADT of proposed facility (opening year)

LOS D, 24749 AADT, 2.5% trucks, 619 truck AADT

LOS, AADT, % trucks, truck AADT of proposed facility (RTP horizon year)

LOS C, No change to AADT, % trucks or truck AADT

If facility is interchange(s) or intersection(s), cross-street AADT, % trucks, truck AADT (opening year):

If facility is interchange(s) or intersection(s), cross-street AADT, % trucks, truck AADT (RTP horizon year):

Continued on next page

Describe potential traffic redistribution effects of congestion relief

This project will ease congestion by eliminating the northbound bottleneck condition. Due to the distance to the nearest north-south arterials both east and west of Mountain View Avenue, no redistribution of vehicles is expected by this congestion relief. Bridges are necessary to cross the flood control channel and a grade separation is highly desirable for the parallel UPRR which bisect the city. These crossings are located approximately one mile apart.

Comments/Explanation/Details

Attach additional sheets as necessary; include narrative reason why POAQC or Not POAQC decision is appropriate

This project is designed to reduce congestion thereby reducing delay and idle time. By allowing a free flow of traffic and reducing the stop and start movement of vehicles air quality will be improved.

This project, being federally funded, has completed the environmental process, gaining approval of both NEPA and CEQA. This environmental process included an air quality component. The City has requested authorization to advertise and construct this project before the funding is withdrawn. This requirement appears to be the final step prior to that authorization. As this project will improve a deficient condition improving air quality we are requesting that this project be considered a **"NOT Project of Air Quality Concern"**

TYPE OF PROJECT:

New state highway; Change to existing state highway
New regionally significant street; Change to existing regionally significant street
New interchange; Reconfigure existing interchange
Intersection channelization
Intersection signalization
Roadway realignment
Bus, rail, or inter-modal facility/terminal/transfer point
Truck weight/inspection station
At or affects location identified in the SIP as a site of actual or possible violation of NAAQS

REFERENCE:

Criteria for Projects of Air Quality Concern (40 CFR 93.123(b)(1)) – PM_{10} and $PM_{2.5}$ hot spots

(i) *New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;*

(ii) *Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related ot he project;*

(iii) *New bus and rail terminals and transfer points than have a significant number of diesel vehicles congregating at a single location;*

(iv) *Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and*

(v) *Projects in or affecting locations, areas, or categories of sites which are identified in the PM10 or PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.*

RTIP ID# *(required)* 200021

Project Description *(clearly describe project)*
Ramona Avenue at State Street-Railroad Crossing Grade Separation [Part of Alameda Corridor Study] Ramona Avenue currently crosses the Union Pacific Railroad tracks north of State Street. The "at-grade" crossing is frequently congested with cars queued up behind the railroad gates while trains are passing. The proximity of State Street further affects traffic movement and is the highest accident rate location in the City. This project will construct a bridge over both State Street and the railroad tracks.

Type of Project *(use Table 1 on instruction sheet)*
Change to existing regionally significant street

County	**Narrative Location/Route & Postmiles** Ramona Avenue at State Street and Union Pacific Railroad-Route & Postmiles N/A **Caltrans Projects – EA#** 08-924628L
San Bernardino	

Lead Agency: City of Montclair

Contact Person	**Phone#**	**Fax#**	**Email**
Michael C. Hudson	909-625-9441	909-621-1584	mhudson@ci.montclair.ca.us

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 X** **PM10 X**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)	**EA or Draft EIS**	**FONSI or Final EIS**	**X**	**PS&E or Construction**	**Other**

Scheduled Date of Federal Action: Construction funds to be obligated by 12-31-06

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start		01 01 99	11-23-03	01 01 07
End	11-23-03	12-31-04	09-30-06	09 30 08

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*
The proposed grade separation improvements are needed to accommodate the increase in rail traffic along the Alameda Corridor East, the increased potential for vehicle/rail car conflicts at the highest accident rate location in the City, and eliminate delays at the existing at-grade crossing. The project will substantially reduce carbon monoxide emissions in a non-attainment air basin. By constructing a bridge over both the railroad tracks and State Street, the traffic conflicts will be eliminated. Motorists' safety will improve considerably by eliminating the conflicts.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
Adjacent land is primarily light industrial development and includes a drive-in theater. The existing development is consistent with the zoning and General Plan. Ramona Avenue is not a truck route. Despite having some light industrial uses, there is very little truck traffic, particularly diesel trucks, on either Ramona Avenue or State Street.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
Opening year-2008; Build: LOS-A; AADT-14,000; %Trucks-<5%; Truck AADT-<500

No Build: LOS-D; AADT-14,000; %Trucks-<5%; Truck AADT-<500

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
Horizon Year-2025; Build: LOS-B; AADT-23,800; %Trucks-<5%; Truck AADT-<700

No Build: LOS-F; AADT-23,800; %Trucks-<5%; Truck AADT-<700

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
N/A

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
N/A

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
While traffic is expected to increase significantly over the next 25 years, most of this traffic will be as a result of development in and around the City. Two grade separation projects are already underway west of this location in the City of Pomona. Therefore, there would be no reason for drivers to use Ramona Avenue as an alternate to the two streets in Pomona. There is one existing at-grade crossing east of Ramona Avenue in the City of Montclair where another grade separation project is planned. This construction will occur after the Ramona Avenue project is complete. It is anticipated that during construction of the Monte Vista Avenue project, traffic on Ramona Avenue will increase. This will be a temporary condition. Without the Monte Vista Avenue project, Ramona Avenue could expect to have a higher AADT with drivers avoiding the congestion on Monte Vista Avenue. Conversely, without the Ramona Avenue project, and with a grade separation at Monte Vista Avenue, the Ramona Avenue AADT would probably be less than forecasted.

Comments/Explanation/Details *(attach additional sheets as necessary)*
The project is located on Ramona Avenue at the grade crossing with the Union Pacific Railroad tracks. Currently the street has two lanes of traffic in each direction. State Street, a two-lane collector street, parallels the tracks and intersects with Ramona Avenue on the south side of the tracks. The State Street/Ramona Avenue intersection has the highest accident rate in the City. A contributing factor to the accident rate is the intersection's proximity to the railroad tracks.

Rail traffic continues to increase on the UP tracks as the Ports of Long Beach and Los Angeles continue to expand their facilities and ship more goods easterly. Trains become longer, slower, and more frequent, resulting in more delays at at-grade crossings. Vehicles waiting for passing trains add measurably to the overall carbon monoxide loading and contribute to the formation of carbon monoxide "hot spots" during peak-hour traffic conditions. Without the project, traffic delays will exceed 110 hours per day as vehicles are required to queue awaiting a train's passage. During the AM peak the delay is 14.6 hours. During the PM peak the delay is over 22 hours. (Source: "Traffic Analysis – Proposed Ramona Avenue Grade Separation" WPA Traffic Engineering, Inc., November 16, 1999)

The project has already received environmental approval under both NEPA and CEQA. A Categorical Exclusion has been approved by FHWA. The approval included an air quality study. The project was also able to obtain CMAQ funding under ISTEA.

The project design has been completed. Most of the right-of-way necessary to construction the project has been acquired. Only one easement remains to acquire. The City anticipates acquiring that easement within the next two months.

RTIP ID# *(required)* RIV990703

Project Description *(clearly describe project)*
The project consists of constructing an underpass at the Jurupa Avenue/UPRR at-grade crossing as well as the permanent closure of Mountain View Avenue at the UPRR at-grade crossing. The project will reconstruct approximately 1000 feet of Jurupa Avenue east and west of the UPRR to allow the roadway to cross under the new railroad bridge. Jurupa Avenue exists as a four lane roadway in the project area. The undercrossing will maintain the existing four lane configuration along Jurupa Avenue.

Type of Project *(use Table 1 on instruction sheet)*
Roadway Realignment - Grade Separation

County	**Narrative Location/Route & Postmiles**
Riverside	**Caltrans Projects – EA#** 08924646

Lead Agency: City of Riverside

Contact Person	**Phone#**	**Fax#**	**Email**
Farshid Mohammadi	951-826-5515	951-826-5542	fmohammadi@riversideca.gov

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 x** **PM10**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)	**EA or Draft EIS**	**FONSI or Final EIS**		**PS&E or Construction**	**Other**
			x		

Scheduled Date of Federal Action:

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	01	09/05	09/05	01/07
End	08/05	09/06	10/06	01/08

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*
The purpose of the project is to improve the safety of motorists and pedestrians crossing the railroad tracks and to eliminate queuing along Jurupa and Mountain View Avenues at the UPRR. Existing UPRR and Metrolink traffic creates regular traffic and safety problems. Rail traffic volumes are expected to increase substantially in the future further aggravating existing traffic and safety issues. The project will provide safer and more efficient auto, truck and rail trips as a result of the grade separation of rail and automotive traffic.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
Residential, Commercial, Light Industrial, Open Space. The project is not growth inducing, and therefore, is not expected to generate additional traffic. The project is intended to improve safety, reduce traffic congestion and eliminate queuing along Jurupa and Mountain View Avenues at the UPRR crossings. The surrounding land uses are primarily residential, and as such, the project is not expected to generate additional truck traffic.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
Build: LOS C or better, 13,760, 3%, 413,

No Build: LOS not available, 12,400, 3%, 372

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
Build (2025): LOS C or better, 19,300, 3%, 579

No Build (2025): LOS not available, 18,820, 3%, 565

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

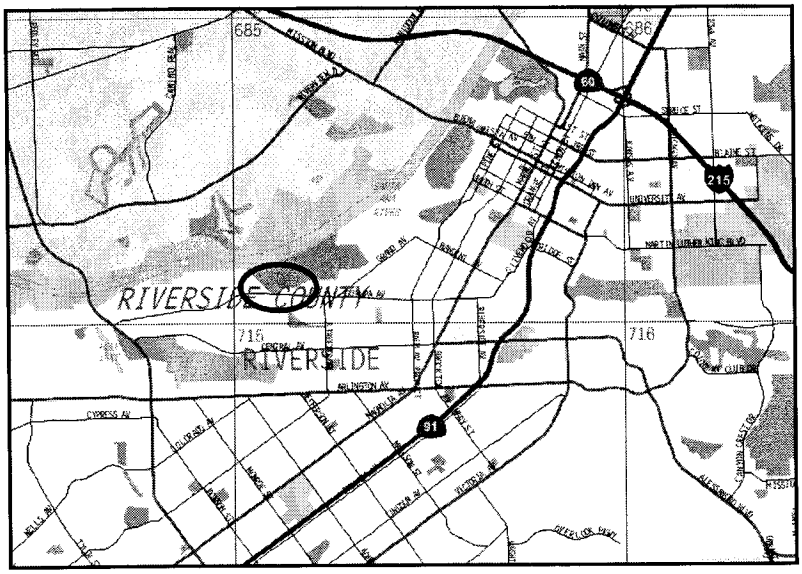
RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

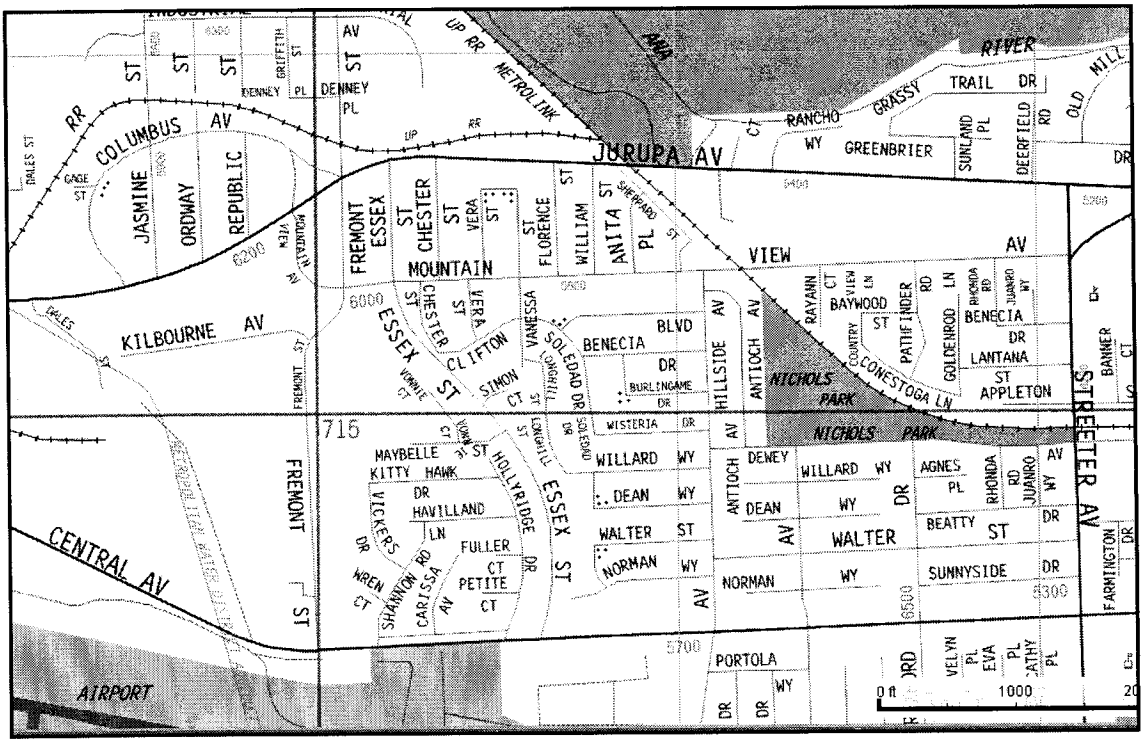
Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
Traffic volumes on Jurupa Avenue at the UPRR are projected to increase from approximately 12,400 to 13,760 vehicles per day in 2007 and to between 18,820 to 19,300 in 2025. Approximately 44 freight trains and 12 Metrolink trains currently utilize the tracks at the Jurupa Avenue and Mountain View Avenue at grade crossings. Rail traffic is projected to increase substantially in the future further exacerbating existing traffic and safety issues at the crossings. The project is expected to provide safer and more efficient auto, truck and rail trips as a result of the grade separation of rail and automotive traffic.

Comments/Explanation/Details *(attach additional sheets as necessary)*
The project is expected to improve air quality by reducing traffic congestion and eliminating vehicles queuing at the Jurupa Avenue and Mountain View Avenue railroad crossings by constructing a grade separated crossing at Jurupa Avenue and the UPRR and by closing the existing at-grade highway/rail crossing at Mountain View Avenue and the UPRR. There will be no additional traffic lanes added due to the project on the Jurupa Avenue. There will be no increase in truck capacity. Mountain View Avenue is a local street going through a residential neighborhood. It is not a truck route, and trucks are prohibited from using this road as a route. Therefore, the closure of Mountain View Avenue should not have an impact on truck traffic. The traffic projections for year 2025 show an increase in number of trucks, however it should be emphasized that this increase is not related to the project, and is in fact part of the projected yearly growth associated with overall population growth/traffic growth in the City.

The project is scheduled for advertisement in Fall 2006. Approval is needed as soon as possible to ensure that the project remains on schedule and the federal fund obligations can occur as planned.

RIV990703
Jurupa Ave UC
Project Sponsor: City of Riverside





RTIP ID# *(required)* ORA000195

Project Description *(clearly describe project)*
The SR-22/West Orange County Connection (WOCC) Project proposes to widen and construct high occupancy vehicle (HOV) lanes on SR-22 from I-405 freeway interchange to SR-55, and other operational improvements (e.g., interchange improvements). See comments section for further details.

Type of Project *(use Table 1 on instruction sheet)*
Change to existing state highway – construct one HOV lane in each direction

County	**Narrative Location/Route & Postmiles** SR-22 between I-405 and SR-55 12-ORA-22 KP/(PM) 1.1/21.2 (0.7/13.2) **Caltrans Projects – EA#** 071611
Orange	

Lead Agency: Orange County Transportation Authority (OCTA)

Contact Person	**Phone#**	**Fax#**	**Email**
Mary Toutounchi	(714) 712-1640	(714) 712-1582	MToutounchi@octa.net

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 X** **PM10 X**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)	**EA or Draft EIS**	**FONSI or Final EIS**	**X**	**PS&E or Construction**	**Other**

Scheduled Date of Federal Action: August, 2006

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	Prior RTIP	Prior RTIP	Prior RTIP	Prior RTIP
End	Complete	05-06	Prior RTIP	05/06

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*
The purpose of the proposed SR-22/WOCC project is to improve both existing and future mobility and enhance safety throughout the corridor. The project area includes the SR-22, from SR-55 to the Los Angeles county line and the interchanges between SR-22 and the connecting freeways within these same limits. SR-22 represents a major link to other freeway systems within the Orange County area and is an important component of the county's transportation system. This specific project area in question is the SR-22 bridge over Magnolia Ave. This coincides with the overall SR-22 widening project.

Under existing conditions, SR-22 does not meet the capacity needs of the area. With projected population and employment growth trends indicating increased transportation volumes, SR-22 can be expected to experience worsening operational deficiencies. There is insufficient capacity within the SR-22 corridor on the freeway and adjacent arterial streets to accommodate existing and projected travel demand between the SR-55 interchange and the Los Angeles County line at I-405 and I-605.

Traffic operations on SR-22 are aggravated by a lack of continuous parallel arterial routes and available arterial/intersection capacity, and is the one freeway in Orange County that does not have HOV facilities.

Some portions of existing SR-22 do not conform to current state and federal highway design standards. Existing shoulder widths and vertical clearances, for example, are non-standard in some areas. Providing standard features where possible will improve safety on the freeway mainline and ramps.

Addressing the capacity deficiency problem, which is also associated with congestion-related accidents, can help in reducing rear-end and sideswipe type of accidents. Operational improvements, which include geometric improvements, on-&-off ramp improvements, resurfacing or new pavements, and upgrading existing roadways can reduce accidents

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
Discussion of land uses/traffic generators will be focused on the City of Garden Grove since this is where the proposed improvements are located.

Garden Grove, similar to almost every other city that borders SR-22, is at full build-out. The most prevalent land use in Garden Grove is residential, occupying approximately 50 percent of the City's total area. Within the project study area, there is a major industrial area located between Knott Street and Hoover Street, north of SR-22. There is a small area north of SR-22, between Beach Boulevard and Harbor Boulevard, which is mixed-use and commercial.

Land use south of SR-22 is predominantly residential and open space. Industrial land uses are also found south of SR-22 between Newhope Street and Harbor Boulevard. The entire area north of SR-22 and south of Trask Avenue,

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Opening Year 2015

Condition	Location	AADT[1,4]	LOS[2]	% Trucks[3]	Truck[4] AADT
Build	Beach Blvd - Knott St	168,700	E	4.9%	8,270
	Harbor Blvd - Euclid St[5]	226,600	E	4.7%	10,650
	I-5/SR-57 - The City Dr[5]	242,200	E	4.5%	10,900
	Main St - I-5/SR-57	179,500	E	4.5%	8,080
	Tustin St - Glassell St	158,700	E	3.4%	5,400
No Build	Beach Blvd - Knott St	153,300	E	4.9%	7,510
	Harbor Blvd - Euclid St	200,300	F	4.7%	9,410
	I-5/SR-57 - The City Dr	219,100	F	4.5%	9,860
	Main St - I-5/SR-57	183,900	E	4.5%	8,280
	Tustin St - Glassell St	167,900	E	3.4%	5,710

1. Interpolated from existing (1996) and 2020 No Build in the FEIS/EIR Table 3.7-3 and 2020 Build in Project Report Attachment F
2. Peak hour worse direction based on interpolated volumes and v/c conversion to LOS based on FEIS/EIR Table 3.7-4
3. Caltrans 2004 truck counts
4. The increases in the AADT for the Build versus No Build conditions are expected as a result of background growth.
5. The Build condition includes LOS improvements on SR-22 between Harbor Blvd and Euclid St. and between I-5/SR-57 and The City Dr.; the LOS improvements along these two segments can result in improved air quality.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Design Year 2020

Condition	Location	AADT[1,4]	LOS[2]	% Trucks[3]	Truck[4] AADT
Build	Beach Blvd - Knott St	177,600	F	4.9%	8,700
	Harbor Blvd - Euclid St	238,100	E	4.7%	11,190
	I-5/SR-57 - The City Dr	251,700	E	4.5%	11,330
	Main St - I-5/SR-57	184,900	E	4.5%	8,320
	Tustin St - Glassell St	162,000	E	3.4%	5,510
No Build	Beach Blvd - Knott St	158,100	E	4.9%	7,750
	Harbor Blvd - Euclid St[5]	204,800	F	4.7%	9,630
	I-5/SR-57 - The City Dr[5]	222,600	F	4.5%	10,020
	Main St - I-5/SR-57[5]	190,500	F	4.5%	8,570
	Tustin St - Glassell St	173,600	E	3.4%	5,900

1. 2020 No Build from the FEIS/EIR Table 3.7-3 and 2020 Build from Project Report Attachment F
2. Peak hour worse direction from FEIS/EIR Table 4.7-6
3. Caltrans 2004 truck counts
4. The increases in the AADT for the Build versus No Build conditions are expected as a result of background growth.
5. The Build condition generally includes LOS improvements on SR-22; the LOS improvements can result in improved air quality.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
Not Applicable
RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
Not Applicable

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
The traffic analysis prepared for the project shows that there will be increases in ramp traffic volumes at the SR-22/Magnolia Street interchange. It is important to note the primary land uses in the vicinity of these ramps are commercial and residential. Therefore, it can be expected that the traffic increases on these ramps would be passenger vehicles. Furthermore, the proposed improvements are operational and facilitate the movement of traffic (e.g., installation of a left-turn pocket lane). Without these improvements, excessive queuing could occur at this interchange. Although there could be additional queuing on the ramps, the improved conditions in the general purpose and carpool lanes will provide for reduced congestion and more consistent traffic flow.

Comments/Explanation/Details *(attach additional sheets as necessary)*

Magnolia Street Undercrossing
The proposed design modifications would consist of replacing the SR-22 freeway structure over Magnolia Street, reconstructing the entire bridge in conjunction with the SR-22 widening. Also, an additional left-turn lane would be provided in the southbound direction of Magnolia Street onto the eastbound SR-22 on-ramp. Figure 1 depicts the reconstruction of the undercrossing and the additional left-turn lane.

We believe this Project is not Project of Air Quality Concern (POAQC) given that the project will not result in increased truck traffic in the area, and will in fact improve the flow of traffic in this area, thereby resulting in overall improvements to air quality along the corridor.

The screening analysis for the new air quality requirements has determined that the proposed reconstruction of the Magnolia Street undercrossing would not contribute to increases in PM2.5 and PM10. This determination is predicated on the premise that the proposed structure replacement at Magnolia Street and left-turn pocket do not contribute to increases in the traffic capacity for the SR-22 facility or on the local arterial. Without these operational improvements, traffic operations could worsen at the Magnolia Street interchange. The proposed improvements are not expected to substantially increase the vehicle fleet mix on SR-22 and the local arterial. As previously discussed, land uses in the vicinity of the SR-22 corridor are primarily light commercial and residential.

The type of activities proposed (e.g., reconstruction of the Magnolia Street undercrossing and addition of a left-turn lane) would not lead to an increase in truck traffic and therefore, can be determined to be *Not POAQC*. See Figure 1 for further detail.

The construction of the mainline HOV on SR-22 is underway and it is anticipated to be complete in early 2007. The Orange County Transportation Authority (OCTA), the Agency responsible for implementation of the SR-22/WOCC project, will request federal funding for the Magnolia Street improvements. Therefore, this *PM Conformity Hot Spot Analysis Project Summary Form for the Interagency Consultation* solicits the concurrence of the Transportation Conformity Workgroup to determine that the proposed improvements described below are not considered POAQC.

Comments/Explanation/Details (continued)
Attach additional sheets as necessary; include narrative reason why POAQC or Not POAQC decision is appropriate
Supplemental Supporting Information

Background
The Final EIS/EIR for the SR-22/WOCC Project, approved in March 2003, proposes to widen and construct high occupancy vehicle (HOV) lanes on SR-22 from the I-405 freeway interchange to SR-55, along with other improvements. Prior to the issuance of the Record of Decision on August 19, 2003, the City of Garden Grove (City) filed a lawsuit against OCTA, Caltrans, and FHWA. The City contended that the proposed SR-22/WOCC project would result in increased traffic congestion within the City's limits and that the issue was not adequately addressed in the EIS/EIR. A settlement was reached between the parties in July 2004. As part of the settlement agreement, OCTA agreed to make modifications (operational improvements) to key intersections that would facilitate traffic flow within the City. Improvements along the City of Garden Grove also included the Magnolia Street undercrossing.

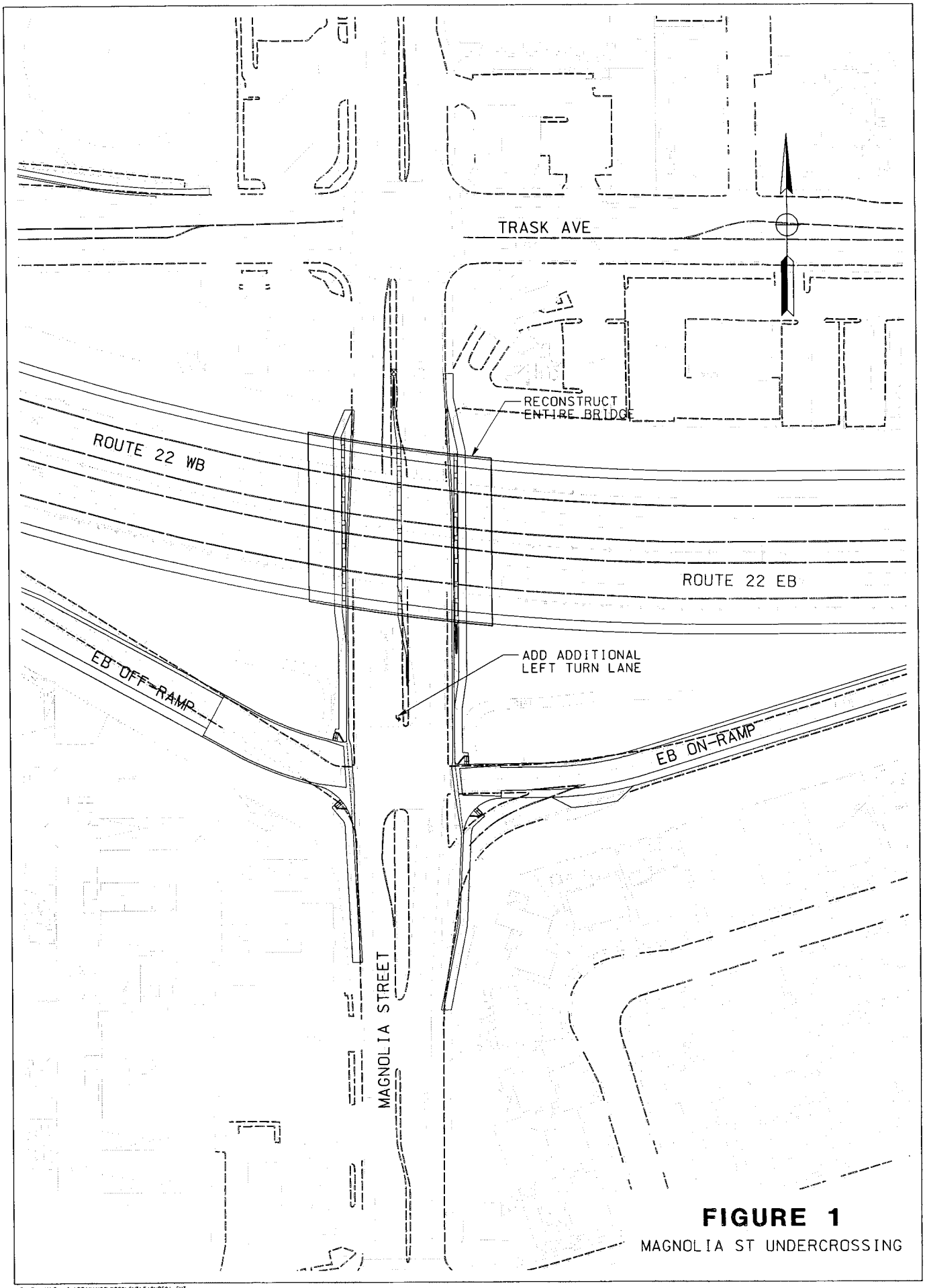


FIGURE 1

MAGNOLIA ST UNDERCROSSING

FILE NAME: O:\DRAWINGS\MOCC\SHT\FIGURE01.SHT
PLOTTED ON: 03/29/06
PLOTTED AT: 9:53:12 AM

RTIP ID# *(required)* 32300

Project Description *(clearly describe project)*
At SR60/Nason St IC – Modify/reconstruct IC & Nason St from Elder to Fir: Realign EB, WB exit plus EB & WB entry ramps, add EB & WB ramp HOV lanes and add aux lanes.

Type of Project *(use Table 1 on instruction sheet)*
Reconfigure existing interchange

County	**Narrative Location/Route & Postmiles** Riv-60- PM 17.8/19.5 (KP 28.7/31.4)
Riverside	**Caltrans Projects – EA#** 32300

Lead Agency: City of Moreno Valley

Contact Person	**Phone#**	**Fax#**	**Email**
Larry Gonzales	(951) 413-3136	(951) 413-3170	larryg@moval.org

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 X** **PM10 X**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

X **Categorical Exclusion (NEPA)**	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**

Scheduled Date of Federal Action:

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	Complete	Jun 2005	Oct 2006	Dec 2007
End	Complete	Nov 2007	Nov 2007	Sep 2008

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*
The ramp interchange improvements are proposed in order to improve freeway access following the completion of new developments planned in the vicinity of the Nason Street interchange. In addition, the existing ramp geometrics are non-standard when compared to current design guidelines. The main purpose of this project is to reconstruct and realign the Nason Street/SR-60 interchange ramps to improve traffic operations and reduce anticipated congestion along Nason Street due to potential future traffic demand. Population growth in the City of Moreno Valley along with planned and proposed developments will result in a substantial increase of daily trips along Nason Street in the vicinity of the interchange.

Daily traffic volumes are projected to reach about 39,000 vpd (vehicles per day) in the year 2025 along Nason Street just south of the Nason Street/SR-60 interchange. This is an increase of about 490 percent from current levels of approximately 8,000 vpd. Without this project, the Nason Street/SR-60 interchange will experience a significant increase in congestion, resulting in the deterioration of traffic operating conditions, occurrence of a potential traffic safety problem and evolvement of a critical roadway system bottleneck. Furthermore, the proposed interchange improvements are necessary to maintain adequate access to the new Riverside County General Hospital and to accommodate planned residential and commercial development in the area.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
Primary land use adjacent to the interchange is residential and is expected to remain the dominant use through the design year. Adjacent land to the north is single family residential and adjacent undeveloped land on the south is in varying stages of conversion to single family residential. One major retailer recently developed a site south and slightly west of the interchange.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

NO ADDITIONAL THROUGH LANES ARE BEING CONSTRUCTED WITH THIS PROJECT
Opening Year Build / NO Build Scenario LOS (Peak HR) EB SR-60 (west of Nason) = C
Openng Year Build / NO Build Scenario LOS (Peak HR) EB SR-60 (east of Nason) = B
Opening Year Build / NO Build Scenario LOS (Peak HR) WB SR-60 (west of Nason) = C
Openng Year Build / NO Build Scenario LOS (Peak HR) WB SR-60 (east of Nason) = C

SR-60 West of Nason St – AADT(cars) = 57161, AADT(trucks) = 10976, % Trucks = 16%
SR-60 East of Nason St – AADT(cars) = 53970, AADT(trucks) = 10288, % Trucks = 16%

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

NO ADDITIONAL THROUGH LANES ARE BEING CONSTRUCTED WITH THIS PROJECT
Horizon Year Build / NO Build Scenario LOS (Peak HR) EB SR-60 (west of Nason) = D
Horizon Year Build / NO Build Scenario LOS (Peak HR) EB SR-60 (east of Nason) = D
Horizon Year Build / NO Build Scenario LOS (Peak HR) WB SR-60 (west of Nason) = F
Horizon Year Build / NO Build Scenario LOS (Peak HR) WB SR-60 (east of Nason) = F

SR-60 West of Nason St – AADT(cars) = 85839, AADT(trucks) = 16686, % Trucks = 16%
SR-60 East of Nason St – AADT(cars) = 83127, AADT(trucks) = 15866, % Trucks = 16%

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
Opening Year Build Scenario –SR-60 EB Ramps / Nason St: LOS (AM/PM) = (A/A)
Opening Year Build Scenario – SR-60 WB Ramps / Nason St: LOS (AM/PM) = (B/B)
Opening Year NO Build Scenario –SR-60 EB Ramps / Nason St: LOS (AM/PM) = (F/C)
Opening Year NO Build Scenario – SR-60 WB Ramps / Nason St: LOS (AM/PM) = (C/C)

Nason St north of SR-60 - AADT(cars) = 3876, AADT(trucks) = 133, % Trucks = 3%
Nason St south of SR-60 - AADT(cars) = 11988, AADT(trucks) = 332, % Trucks = 3%

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
Horizon Year Build Scenario –SR-60 EB Ramps / Nason St: LOS (AM/PM) = (F/F)
Horizon Year Build Scenario – SR-60 WB Ramps / Nason St: LOS (AM/PM) = (B/C)
Horizon Year NO Build Scenario –SR-60 EB Ramps / Nason St: LOS (AM/PM) = (F/F)
Horizon Year NO Build Scenario – SR-60 WB Ramps / Nason St: LOS (AM/PM) = (F/F)

Nason St north of SR-60 - AADT(cars) = 5720, AADT(trucks) = 200, % Trucks = 3%
Nason St south of SR-60 - AADT(cars) = 16451, AADT(trucks) = 533, % Trucks = 3%

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
Project area is experiencing population and traffic growth common to entire city of Moreno Valley. Current and expected growth adjacent to the interchange is primarily residential (in contrast to commercial and industrial expansion in other parts of the city). As indicated in the preceding boxes, level of service for the build condition will improve in the opening year and will deteriorate more slowly in the build than in the no-build condition. Diesel truck traffic is not expected to increase as a result of this project.

Comments/Explanation/Details *(attach additional sheets as necessary)*
This project is an "interim" project in which the on and off ramps are constructed to ultimate configurations, but the Nason Street Overcrossing is not yet widened and additional through lanes along SR-60 are not constructed. And therefore along SR-60, the Build / No Build Scenarios for Opening Year and Horizon Year are considered the same.

The project would serve to improve traffic flow along Nason Street for several years until additional funds are available to widen / replace the overcrossing to its ultimate width of six lanes and the widening of Nason Street can also be constructed. Preliminary studies to widen / replace the existing overcrossing and street widening are underway, but the design and construction of these projects are several years away.

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

Project Description *from TIP, RTP, and/or project documents* **RTIP ID#:** RIV62034

The County of Riverside (County), in association with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), is proposing to modify the existing interchange at Interstate 15 (I-15) and Clinton Keith Road located in the southwestern portion of the County. This proposed project maintains the existing diamond interchange configuration, while reconstructing the ramps and widening Clinton Keith Road. Both exit ramps would be two-lane exits with 1,300-foot long auxiliary lanes prior to the diverge points. Both entrance ramps are three lanes from the terminus to the ramp metering limit line and drop to one lane at the ramp convergence point. Both entrance ramps have 980-foot long auxiliary lanes after their tie-ins to I-15. Clinton Keith Road would be widened to allow for three lanes in each direction in addition to turn lanes. The bridge structure would be widened as part of the proposed project.

Type of project *see list below*
Reconfigure existing interchange

County: Riverside	**Narrative Location/Route & Postmiles: I-15/Clinton Keith Road Interchange Riv-15-PM 13.0/14.3** **Caltrans Projects – EA#:** 0F5800

Lead Agency: County of Riverside

Contact Person	**Phone#**	**Fax#**	**Email**
Tayfun Saglam	951.955.2871	951.955.3164	tsaglam@rctlma.org

Decision Desired *Check appropriate box below*

PM2.5		**MAYBE Project of Air Quality Concern**	X	**NOT Project of Air Quality Concern**
PM10		**MAYBE Project of Air Quality Concern**	X	**NOT Project of Air Quality Concern**

Federal Action for which PM Analysis is Needed *Check appropriate box and describe in Comments below*

X	**Categorical Exclusion (NEPA)**		**EA or Draft EIS**		**FONSI or Final EIS**		**PS&E or Construction**		**Other**

Scheduled Date of Federal Action: 10/06

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	11/05	11/06	1/07	1/08
End	11/06	10/07	10/07	12/08

Project Purpose and Need (Summary): *Attach additional sheets as necessary*

In recent years, there has been an increasing amount of vehicular traffic as the population and economic vitality increases throughout Riverside County, particularly in the project vicinity. The effect of this growth has been the increased level of congestion located at the I-15/Clinton Keith Road interchange. To alleviate congestion and improve traffic operations in the interchange area, the County, Caltrans, and FHWA are proposing to widen the existing Clinton Keith Road overcrossing, and reconstruct the interchange exit and entrance ramps. The primary purpose of the proposed project is to improve traffic operations in the interchange area.

Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)
Land use in the project vicinity consists of a mix of commercial/retail (e.g., gas stations, restaurants, specialty shops, etc.), vacant/undeveloped, and (beyond the immediate interchange quadrants) residential development. A description of land use at the respective quadrants of the I-15/Clinton Keith Road interchange follows:
Northeast quadrant = primarily vacant, with some commercial.
Southeast quadrant = commercial/retail.
Southwest quadrant = undeveloped (proposed commercial/retail).
Northwest quadrant = commercial/retail.

Build and No Build LOS, AADT, % trucks, truck AADT of proposed facility (opening year - 2009)
LOS C-E for Build and No Build, 135,500 (AADT), 5.1% (% Diesel Trucks), 6,910 (Truck AADT)

Build and No Build LOS, AADT, % trucks, truck AADT of proposed facility (RTP horizon year or design year - 2030)
LOS D-F for Build and No Build (Note that acceleration and deceleration lanes are being added to each interchange ramp in the Build condition, which will improve the merge/diverge LOS), 154,300 (AADT), 5.1% (% Diesel Trucks), 7,870 (Truck AADT)

If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % trucks, truck AADT (opening year - 2009)
0,490 (Build and No Build AADT), 5.1% (% Diesel Trucks), 1,045 (Truck AADT)
If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % trucks, truck AADT (RTP horizon year or design year - 2030):
32,535 (Build and No Build AADT), 5.1% (% Diesel Trucks), 1,660 (Truck AADT)

Describe potential traffic redistribution effects of congestion relief
The proposed project will provide congestion relief and improve operations of the interchange by smoothing traffic flow and vehicle speeds. Additional turn pockets are provided on Clinton Keith Road and the interchange ramps, and ramp metering would be added to the entrance ramps. These proposed improvements to the existing interchange are not expected to create or worsen PM_{10} or $PM_{2.5}$ emissions.

Comments/Explanation/Details
Attach additional sheets as necessary; include narrative reason why POAQC or Not POAQC decision is appropriate
See attached PM_{10} and $PM_{2.5}$ analysis excerpt from the project's Air Quality Study demonstrating why this particular project is NOT a Project of Air Quality Concern (POAQC).

TYPE OF PROJECT:

New state highway
New regionally significant street
New interchange
Intersection channelization
Roadway realignment
Bus, rail, or inter-modal facility/terminal/transfer point
Change to existing state highway
Change to existing regionally significant street
Reconfigure existing interchange
Intersection signalization

Continued on next page

Truck weight/inspection station
At or affects location identified in the SIP as a site of actual or possible violation of NAAQS

REFERENCE:
Criteria for Projects of Air Quality Concern (40 CFR 93.123(b)(1)) – PM_{10} and $PM_{2.5}$ Hot Spots

(i) *New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;*

(ii) *Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;*

(iii) *New bus and rail terminals and transfer points than have a significant number of diesel vehicles congregating at a single location;*

(iv) *Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and*

(v) *Projects in or affecting locations, areas, or categories of sites which are identified in the PM10 or PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.*

PM_{10} AND $PM_{2.5}$ HOT SPOT ANALYSIS – EXCERPTS FROM AIR QUALITY STUDY

I-15/CLINTON KEITH ROAD INTERCHANGE IMPROVEMENT PROJECT

EA# 0F5800

RIVERSIDE COUNTY, CALIFORNIA

Prepared for

County of Riverside
Transportation and Land Management Agency
4080 Lemon Street
Riverside, CA 92502

Prepared by

URS Corporation
2020 East First Street, Suite 400
Santa Ana, CA 92705

July 2006

1.1 PROJECT LEVEL PM_{10} HOT SPOT ANALYSIS

As shown in Table 1, the Air Basin, which includes part of the County, is in serious nonattainment of PM_{10} per federal designation. Because the project is located in an area that is federally designated as nonattainment for PM_{10}, a qualitative PM_{10} hot spot analysis is required by the Transportation Conformity Rule (40 CFR Parts 51 and 93). Per Section 93.116 of the Transportation Conformity Rule, any project-level conformity determination in a PM_{10} nonattainment or maintenance area must document that no new local PM_{10} violations will be created and the severity or number of existing violations will not be increased as a result of the project.

FHWA Guidance was followed for this project-level PM_{10} hot spot analysis. The FHWA Guidance states that a reasoned and logical explanation of why a hot spot will not be created or worsened should be provided for project-level conformity determinations.

Table 1 – Designations of Criteria Pollutants for the Air Basin

Pollutant	Federal	State
O_3 (1-hr)	Extreme Nonattainment	Nonattainment
O_3 (8-hr)	Severe Nonattainment	Nonattainment
NO_2	Attainment	Attainment
CO	Serious Nonattainment	Attainment
PM_{10}	Serious Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment

Source for State Information: CARB
Source for Federal Information: EPA

1.1.1 Existing Local PM_{10} Air Quality

The closest air monitoring station to the project is the Perris Station. The Station is approximately 32 km north of the project site and is likely to experience similar environmental conditions as the project site. Table 2 provides the highest 24-hour daily PM_{10} measurements for the Perris Station for the last five years. As shown in Table 2.3-2, the daily PM_{10} at the Perris Station has not exceeded the daily NAAQS of 150 $\mu g/m^3$ in the last five years.

Table 2 – Background Air Pollution Data Summary for PM_{10} at Perris Station

Year	Highest 24-hour Concentration for PM_{10} ($\mu g/m^3$)	Number of Days Exceeding State Standard	Annual Arithmetic Mean for PM_{10} ($\mu g/m^3$)
2000	87	13	41.1
2001	86	16	40.8
2002	100	21	45.1
2003	142 (116 H2H)	17	43.9
2004	83	15	41.4

Monitor Site Address: 237 North D Street Perris, Ca
Source of data: SCAQMD, EPA AIRS
CAAQS: 24-hour = 50 $\mu g/m^3$, Annual = 20 $\mu g/m^3$; NAAQS: 24-hour = 150 $\mu g/m^3$, Annual = 50 $\mu g/m^3$

1.1.2 Qualitative PM_{10} Hot Spot Conclusion

Studies have been performed indicating that if no violations have been recorded in the project vicinity by air district monitors, and the monitored concentrations are not close to the NAAQS (meaning less than

about 80 to 90% of the NAAQS threshold), no PM_{10} hot spot can occur as a result of a typical project (Caltrans Interim Guidance, 2002). As shown in Table 2, the highest daily measured PM_{10} concentrations in the area for 2002, 2003, and 2004 were 100 $\mu g/m^3$, 142 $\mu g/m^3$, and 83 $\mu g/m^3$, respectively. These measured concentrations represent less than 80% of the NAAQS of 150 $\mu g/m^3$; except for 2003. The reading in 2003 is an anomaly; the maximum recorded concentration was on February 2, which was a high wind event day (winds 25-35 miles per hour). These winds most likely created higher than normal amounts of fugitive dust. The next highest reading at the Perris Station recorded in 2003 is 116 $\mu g/m^3$ and this value should be used to assess compliance with the NAAQS. If this anomalous high reading is ignored and the second highest value is used instead, all monitored 24-hour PM_{10} concentrations in the vicinity of the project site are less than 80% of the NAAQS. Thus, a PM_{10} hot spot is not expected to occur with the implementation of this project.

1.2 PROJECT LEVEL $PM_{2.5}$ HOT SPOT ANALYSIS

On March 10, 2006, EPA published a final rule that establishes the transportation conformity criteria and procedures for determining which transportation projects must be analyzed for local air quality impacts in $PM_{2.5}$ and PM_{10} nonattainment and maintenance areas (71 FR 12468). The final rule also provides flexibility so that state and local resources are used efficiently. The EPA and FHWA have developed a guidance document, *Transportation Conformity Guidance for Qualitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas*, March 2006, to help state and local agencies meet the final rule's hot-spot analysis requirements.

Future qualitative $PM_{2.5}$ and PM_{10} hot-spot analyses should be based on the new guidance, which supersedes the existing FHWA September 12, 2001, *Guidance for Qualitative Project-Level 'Hot Spot' Analysis in PM10 Nonattainment and Maintenance Areas*. However, any PM_{10} hot-spot analysis that was started prior to the release of EPA and FHWA new guidance may be completed with the previous 2001 guidance.

As shown in Table 3, the Air Basin, which includes part of the County, is in nonattainment of $PM_{2.5}$ per federal designation. Because the project is located in an area that is federally designated as nonattainment for $PM_{2.5}$, a qualitative $PM_{2.5}$ hot spot analysis is required by the Transportation Conformity Rule (40 CFR Parts 51 and 93).

Table 3 – Designations of Criteria Pollutants for the Air Basin

Pollutant	Federal	State
O_3 (1-hr)	Extreme Nonattainment	Nonattainment
O_3 (8-hr)	Severe Nonattainment	Nonattainment
NO_2	Attainment	Attainment
CO	Serious Nonattainment	Attainment
PM_{10}	Serious Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment

Source for State Information: CARB
Source for Federal Information: EPA

1.2.1 Existing Local $PM_{2.5}$ Air Quality

The air monitoring station nearest to the project that records $PM_{2.5}$ is the Riverside Magnolia Station. The Magnolia Station is approximately 45 km (28 miles) north of the project site and is located in an urban area. The conditions at the Magnolia Station are significantly different from those at the project site. Thus, it is unlikely to experience similar environmental conditions as the project site. Table 4 provides the highest 98th percentile 24-hour daily $PM_{2.5}$ measurements for the Magnolia Station for the last five years. The 24-hour standard is attained when 98% of the daily concentrations averaged over three years are equal to or less than the standard. As shown in Table 4, the daily 98th percentile $PM_{2.5}$ at the Perris Station has not exceeded the daily NAAQS of 65 $\mu g/m^3$ in the last three years. (Preliminary EPA AIRS data indicate the one-year 98th percentile for 2005 is 41 $\mu g/m^3$.)

Table 4 – Background Air Pollution Data Summary for $PM_{2.5}$ at Riverside Magnolia Station

Year	Highest 24-hour 98th Percentile Concentration for $PM_{2.5}$ ($\mu g/m^3$)	Number of Days Exceeding Federal Standard	Annual Mean for $PM_{2.5}$ ($\mu g/m^3$)
2000	66.8	1	25.3
2001	65.8	1	28.2
2002	63.7	0	27.1
2003	56.2	0	22.6
2004	53.7	0	20.8

Monitor Site Address: Riverside Magnolia, 5888 Mission Blvd., Riverside, CA
Source of data: SCAQMD, EPA AIRS
CAAQS: Annual = 12 $\mu g/m^3$; NAAQS: 24-hour = 65 $\mu g/m^3$, Annual = 15 $\mu g/m^3$

1.2.2 Qualitative $PM_{2.5}$ Analysis

Clean Air Act section 176(c)(1)(B) is the statutory criterion that must be met by all projects in nonattainment and maintenance areas that are subject to transportation conformity. Section 176(c)(1)(B) states that federally-supported transportation projects must not "cause or contribute to any new violation of any standard in any area; increase the frequency or severity of any existing violation of any standard in any area; or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area."

To meet statutory requirements, the March 10, 2006 final rule requires $PM_{2.5}$ and PM_{10} hot-spot analyses to be performed for projects of air quality concern (POAQC). Qualitative hot-spot analyses would be done for these projects before appropriate methods and modeling guidance are available and quantitative $PM_{2.5}$ and PM_{10} hot-spot analyses are required under 40 CFR 93.123(b)(4).

EPA specified in 40 CFR 93.123(b)(1) of the final rule that POAQC are certain highway and transit projects that involve significant levels of diesel vehicle traffic, or any other project that is identified in the $PM_{2.5}$ or PM_{10} SIP as a localized air quality concern. The final rule defines the projects of air quality concern that require a $PM_{2.5}$ or PM_{10} hot-spot analysis in 40 CFR 93.123(b)(1) as:

- New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;

- Projects affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles, or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
- Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- Projects in or affecting locations, areas, or categories of sites which are identified in the $PM_{2.5}$ or PM_{10} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Based on the *Transportation Conformity Guidance for Qualitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas*, March 2006, POAQC include projects that have greater than 125,000 annual average daily traffic (AADT) volumes and greater than or equal to eight percent diesel truck traffic.

Existing (2004) AADT for I-15 at the Clinton Keith Road are equal to or higher than the 125,000 'significance' threshold value and the AADT values on Clinton Keith Road are less than half that value. The 2030 No Build scenario has AADT on I-15 greater than 160,000 and 46,000 on Clinton Keith Road. Table 5 presents the existing, future no build, and future build ADT value for the Clinton Keith Road/I-15 interchange project.

Table 5 – ADT for the Clinton Keith Road/I-15 Interchange Improvement Project

Roadway Segment			Existing	2030	
Roadway	**From**	**To**		**No Build**	**Build**
I-15	Baxter Road	Clinton Keith Road	125,500	167,115	167,115
	Clinton Keith Road	California Oaks Road	131,000	154,335	154,335
	SB off ramp	Clinton Keith Road	3,900	15,855	15,855
	SB on ramp		6,725	8,915	8,915
	NB off ramp	Clinton Keith Road	5,675	8,835	8,835
	NB on ramp		4,000	14,675	14,675
Clinton Keith Road	Nutmeg Street	I-15	17,620	32,535	32,535
	I-15	Palomar Street	23,690	46,180	46,180

Caltrans (2005) reports that the existing total diesel truck percentage in the project vicinity is 8.4% for all trucks (includes diesel and gasoline). For purposes of this analysis, it is assumed that all trucks with 3 or more axels are diesel fired and 50% of the 2-axel trucks are diesel fired. Using this methodology, which has been discussed with Caltrans staff, the existing total diesel-fired truck percentage is 5.1 percent. The proposed project, in and of itself, will not result in an increase in vehicular traffic (including diesel-fired truck use). The project consists of widening the existing Clinton Keith Road overcrossing and associated entrance and exit ramps – this is not a project on a new alignment providing for new points of access. Further, the project surroundings consists predominantly of existing (and planned) residential development with retail establishments in the immediate area of the interchange. Taking all this into

consideration, it is reasonable to expect that future (i.e., year 2030) no build and build total diesel-fired truck percentages will decrease in the project area as land that is currently vacant is developed for residential use. This is particularly the case if the same methodology and assumptions are used for the future condition (build or no build) as was for the existing conditions regarding diesel-fired truck percentage.

The existing, future no-build, and future build LOS values for the intersections in the project area are presented in Table 6.

Table 6 – LOS Results for the Clinton Keith Road/I-15 Interchange Improvement Project

SEGMENT	LEVEL OF SERVICE (LOS)					
	Existing		2030 No-Build		2030 Build	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
I-15 Mainline, southbound before Clinton Keith Road	C	D	D	F	D	F
Clinton Keith Road, southbound off-ramp	D	E	D	E	A	B
Clinton Keith Road, southbound on-ramp	C	D	E	E	D	D
I-15 Mainline, southbound after Clinton Keith Road	C	D	D	E	D	E
I-15 Mainline, northbound before Clinton Keith Road	D	D	D	F	D	F
Clinton Keith Road, northbound off-ramp	D	D	D	E	A	A
Clinton Keith Road, northbound on-ramp	D	D	E	F	D	D
I-15 Mainline, northbound after Clinton Keith Road	D	D	D	E	D	E

1.2.3 Qualitative $PM_{2.5}$ Hot Spot Conclusion

Based on conversations with Caltrans staff, the 125,000 AADT and 8% diesel truck traffic are not firm 'significant' or 'threshold' values but are guideline values used to assess whether each individual project could be classified as a POAQC. As indicated in the above tables and text, the existing and future AADT are slightly greater than the 125,000 AADT guideline values. However, the existing and future diesel truck percentage is less than the 8% guideline value. Therefore, the proposed project should not be classified as a POAQC.

Also, as indicated in Table 6, completion of the proposed project will have a benefit in the LOS of the entire interchange and thus reduce idling of stopped traffic. Less idling of traffic reduces the amount of particulates in the air and thus improves air quality in a specific region.

1.3 Mitigation of PM_{10} and $PM_{2.5}$ During Construction

The submitted 2004 Particulate Matter SIP contains provisions calling for mitigation of PM_{10} emissions during construction. Pursuant to Section 93.117, the project is required to include in its final plans, specification, and estimates, control measures that will limit the emission of PM_{10} during construction. Such control plans must be contained in an applicable SIP. The prime concern during construction is to

mitigate PM_{10} that occurs from earth-moving activities, such as grading. The agency who sponsored the PM_{10} SIP is SCAQMD with concurrence from the CARB. SCAQMD has published the 2004 Rule 403 Fugitive Dust Implementation Handbook (SCAQMD, 2004) that addresses the mitigation of PM_{10} by reducing the ambient entrainment of fugitive dust. Fugitive dust consists of solid particulate matter that becomes airborne due to human activity (i.e., construction) and is a subset of total suspended particulates. Likewise, PM_{10} is a subset of total suspended particulates. The Handbook states that 50% of total suspended particulate matter is comprised of PM_{10}. Hence, in mitigating for fugitive dust, emissions of PM_{10} are reduced.

The Handbook categorizes mitigation of fugitive dust into three sections: best available control measures (BACM); Dust Control Measures for Large Operations; and Contingency Control Measures for Large Operations. BACM is the set of control measures that should be used on all construction activity sources within the boundaries of the SCAQMD. Large operations are defined as those active operations on any parcel that contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic meters or more that occurred three times during the most recent 365-day period. Since the proposed project is within the boundary of the SCAQMD and it is not a large operation, BACM is the appropriate mode of mitigation.

BACM are listed in Table 1 of the Handbook. The Handbook distinctly recognizes the following 20 types of fugitive dust sources:

- Backfilling;
- Clearing and grubbing;
- Clearing forms;
- Crushing;
- Cut and fill;
- Demolition – mechanical or manual;
- Disturbed soil;
- Earth-moving activities;
- Importing/exporting of bulk materials;
- Landscaping;
- Road shoulder maintenance;
- Screening;
- Staging areas;
- Stockpiles/bulk material handling;
- Traffic areas of construction activities;
- Trenching;
- Truck loading;
- Turf overseeding;
- Unpaved roads/parking lots, and
- Vacant land.

For detailed information, please refer to the 2004 edition of the Handbook.

SCAQMD requires that at least one BACM be implemented for each source of fugitive dust. In addition, Rule 403 requires activities defined as "large operations" to notify the SCAQMD by submitting Form 403N, implement the Rule 403 Table 2 and 3 control actions, and maintain records of control measure implementation. In summary, Rule 403 should be adhered to for the control of fugitive dust by implementing BACM during active operations capable of generating dust. Implementation of any PM_{10} control measures will also control $PM_{2.5}$.

RTIP ID# *(required)* 1830

Project Description *(clearly describe project)*
I-10 at Cedar Avenue between Slover Avenue and Valley Boulevard - reconstruct interchange, widen from 4 to 6 lanes with right and left turn lanes. Add aux lane on eastbound on and off ramps.

Type of Project *(use Table 1 on instruction sheet)*
Reconfigure existing interchange

County	**Narrative Location/Route & Postmiles** 08-SBD-10 PM17.8/19.3
San Bernardino	**Caltrans Projects – EA#** IA8300

Lead Agency: County of San Bernardino

Contact Person	**Phone#**	**Fax#**	**Email**
Chris Saed	(909)387-7877	(909)387-8130	cased@dpw.sbcounty.gov

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 x** **PM10 x**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)		**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**
	x				

Scheduled Date of Federal Action:

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	04-30-2002	07/20/2007	07/01/2007	02/10/2009
End	06/01/2007	09/01/2008	09/10/2008	02/20/2011

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

When the Cedar Avenue/I-10 interchange was built, the surrounding land uses were predominately agricultural. As development has occurred throughout San Bernardino County, including the area around the I-10/Cedar Avenue interchange, traffic volumes on local streets such as Cedar Avenue and on I-10 have increased substantially.

I-10 is the principal east/west circulation route for automobiles and trucks into and out of the Los Angeles Basin. I-10 currently handles 200,000 vehicles per day (vpd), with a projected traffic count of 251,582 vpd by 2030. Interchanges along I-10 throughout the Inland Empire were typically built at every 1.6 kilometers (km) (1 mile [mi]), with overcrossings or undercrossings approximately every 0.8 km (0.5 mi).

The purpose of the proposed I-10/Cedar Avenue interchange project is to alleviate substantial traffic congestion and delays during the morning and afternoon peak periods and to accommodate projected future traffic volumes at the I-10/Cedar Avenue interchange. Cedar Avenue between Slover Avenue and Valley Boulevard currently experiences substantial traffic congestion and delays during the morning and afternoon peak periods. Traffic forecasts indicate that congestion will worsen over time unless operational and capacity improvements to this interchange are made. The existing levels of service (LOS) on Cedar Avenue and the I-10 westbound ramps are LOS F in the a.m. peak hour and LOS C in the p.m. peak hour. The existing LOS on Cedar Avenue and the I-10 eastbound ramps are LOS D for the a.m. peak hour and LOS F in the p.m. peak hour. If no improvements are made to the existing I-10/Cedar Avenue interchange, the 2009 LOS for Cedar Avenue and the I-10 westbound and eastbound ramps will be LOS F for the a.m. and p.m. peak hours.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
The land uses within the vicinity of the I-10/Cedar Avenue interchange include residential, commercial, and light industrial developments.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
LOS F/E, Total AADT = 209,900*, Truck AADT = 20,990* (10%), Year 2009, Along I-10

* These traffic volumes apply to both the No Build and Build Alternatives.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
LOS F/F, Total AADT = 251,582*, Truck AADT = 25,158* (10%), Year 2030, Along I-10

* These traffic volumes apply to both the No Build and Build Alternatives.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
LOS D/D, Total AADT = 43,600*, Truck AADT = 2,530* (5.8%), Year 2009, Along Cedar Avenue

* These traffic volumes apply to both the No Build and Build Alternatives.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
LOS F/D, Total AADT = 52,000*, Truck AADT = 3,000* (5.8%), Year 2030, Along Cedar Avenue

* These traffic volumes apply to both the No Build and Build Alternatives.

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
See attached analysis

Comments/Explanation/Details *(attach additional sheets as necessary)*
See attached analysis

Particulate Matter (PM_{10} and $PM_{2.5}$) Analysis

The proposed project is within a nonattainment area for federal PM2.5 and PM_{10} standards. Therefore, per 40 CFR Part 93 analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

i. The proposed project is not a new or expanded highway project. The proposed project is an interchange reconstruction project that does not increase the capacity of I-10. This type of project improves freeway interchange operations by reducing traffic congestion and improving merge operations. Based on the *Traffic Analysis* (LSA Associates, Inc., October 2003), the proposed project would increase the capacity of Cedar Avenue. However, the traffic volumes along Cedar Avenue would not exceed the 125,000 average daily trips threshold for a POAQC. In addition, as the project interchange serves a primarily residential area, the truck traffic percentage would not exceed the eight percent threshold for POAQC. The future traffic volumes along Cedar Avenue are shown in Table G.

ii. The proposed project does not affect intersections that are at level of service (LOS) D, E, or F with a significant number of diesel vehicles. Based on the *Traffic Analysis*, the proposed project would reduce the delay and improve the LOS at intersections within the project vicinity. The LOS conditions in the project vicinity with and without the proposed project are shown in Tables H, I, and J.

iii. The proposed project does not include the construction of a new bus or rail terminal.

iv. The proposed project does not expand an existing bus or rail terminal.

Table G: 2030 Average Daily Traffic Volumes

Roadway Link	Without Project Traffic Volumes	Alternative 2A Traffic Volumes	Alternative 2E Traffic Volumes
Cedar Avenue north of Bloomington Avenue	30,000	30,000	30,000
Cedar Avenue between Bloomington Avenue and Valley Boulevard	36,500	36,500	36,500
Cedar Avenue between Valley Avenue and Westbound I-10 Ramps	52,000	52,000	48,200
Cedar Avenue between Westbound I-10 Ramps and Eastbound I-10 Ramps	43,600	43,600	43,600
Cedar Avenue between Eastbound I-10 Ramps and Orange Street	38,700	38,700	38,700
Cedar Avenue between Orange Street and Slover Avenue	35,300	35,300	35,300
Cedar Avenue South of Slover Avenue	28,400	28,400	28,400
Valley Boulevard East of Cedar Avenue	20,800	20,800	35,900

Source: LSA Associates, Inc., October 2003.

Table H: 2030 without Project Intersection Levels of Service

Intersection		A.M. Peak Hour			P.M. Peak Hour		
		V/C	Delay (sec)	LOS	V/C	Delay (sec)	LOS
1.	Cedar Avenue/Bloomington Avenue	0.60	11.0	B	0.63	8.8	A
2.	Cedar Avenue/Valley Boulevard	0.72	22.2	C	1.01	48.3	F
3.	Cedar Avenue/I-10 Westbound Ramps	0.91	25.3	C	1.01	44.2	F
4.	Cedar Avenue/I-10 Eastbound Ramps	1.21	77.7	F	1.13	61.5	F
5.	Cedar Avenue/Orange Street	0.66	6.5	A	0.76	8.2	A
6.	Cedar Avenue/Slover Avenue	0.92	34.4	C	1.06	69.2	F

Notes:

V/C = Volume/Capacity Ratio

LOS = Level of Service

Table I: 2030 with Proposed Project (Alternative 2A) Intersection Levels of Service

Intersection		A.M. Peak Hour			P.M. Peak Hour		
		V/C	Delay (sec)	LOS	V/C	Delay (sec)	LOS
1.	Cedar Avenue/Bloomington Avenue	0.63	14.9	B	0.62	10.5	B
2.	Cedar Avenue/Valley Boulevard	0.74	25.9	C	0.74	28.4	C
3.	Cedar Avenue/I-10 Westbound Ramps	0.49	14.9	B	0.67	18.1	B
4.	Cedar Avenue/I-10 Eastbound Ramps	0.66	27.3	C	0.63	21.3	C
5.	Cedar Avenue/Orange Street	0.47	7.2	A	0.53	5.5	A
6.	Cedar Avenue/Slover Avenue	0.61	23.7	C	0.72	27.3	C

Notes:

V/C = Volume/Capacity Ratio

LOS = Level of Service

Table J: 2030 with Proposed Project (Alternative 2E) Intersection Levels of Service

Intersection		A.M. Peak Hour			P.M. Peak Hour		
		V/C	Delay (sec)	LOS	V/C	Delay (sec)	LOS
1.	Cedar Avenue/Bloomington Avenue	0.60	12.5	B	0.62	11.1	B
2.	Cedar Avenue/Valley Boulevard	0.81	39.0	D	0.74	33.3	C
3.	Cedar Avenue/I-10 Westbound Ramps	No conflicting movements					
4.	Cedar Avenue/I-10 Eastbound Ramps	0.75	29.2	C	0.79	25.8	C
5.	Cedar Avenue/Orange Street	0.46	6.4	A	0.53	8.4	A
6.	Cedar Avenue/Slover Avenue	0.60	27.0	C	0.71	32.8	C
7.	Westbound Hook Ramps/Valley Boulevard	0.63	21.4	C	0.81	27.0	C

Notes:

V/C = Volume/Capacity Ratio

LOS = Level of Service

Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM_{10} or $PM_{2.5}$ violation.

RTIP ID# *(required)* 20020812

Project Description *(clearly describe project)*
Interstate 10 (I-10) at Cherry Avenue interchange. Interchange reconstruction. Widen interchange from Slover Avenue to Valley Boulevard from 4 to 6 lanes with double left turn lanes to ramps.

Type of Project *(use Table 1 on instruction sheet)*
Reconfigure existing interchange

County	**Narrative Location/Route & Postmiles** 08-SBD-10 PM12.5-13.8
San Bernardino	**Caltrans Projects – EA#** 468000

Lead Agency: County of San Bernardino

Contact Person	**Phone#**	**Fax#**	**Email**
Chris Saed	(909)387-7877	(909)387-7877	csaed@dpw.sbcounty.gov

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 x** **PM10 x**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)		**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**
	x				

Scheduled Date of Federal Action:

Current Programming Dates *as appropriate*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	07/09/2002	08/01/2007	08/01/2007	01/10/2009
End	07/26/2007	09/01/2008	09/01/2008	01/10/2011

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

The purpose of the project is to improve the operation of the existing interchange and local circulation, enhance safety, alleviate existing level of service deficiencies, and accommodate projected future traffic volumes within the project vicinity.

The proposed improvements are needed to alleviate existing traffic congestion and accommodate projected future traffic volumes at the Cherry Avenue/I-10 interchange. The primary geometric constraint at the interchange is the short reversing left turn pockets to the eastbound and westbound on-ramps. The Cherry Avenue interchange is used heavily by trucks, and these left turn pockets can only accommodate one truck. As a result, vehicles queuing beyond the left turn pockets block the adjacent through lanes on Cherry Avenue. Additionally, the off-ramps frequently queue beyond the mainline exit nose due to an insufficient number of lanes on each off-ramp and inadequate capacity through the ramp intersections. The main reasons for the existing operational deficiencies are heavy truck volumes and the previously mentioned geometric constraints. The heavy truck volumes at the interchange are a result of significant industrial uses in the City, the two truck stops, and the truck repair businesses located adjacent to the interchange.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
The surrounding land uses consist primarily of truck stops, truck repair facilities, and industrial uses.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
LOS F, Total AADT = 220,000*, Truck AADT = 21,208* (9.64%), Year 2004, Along I-10

* These traffic volumes apply to both the No Build and Build Alternatives.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
LOS F, Total AADT = 276,740*, Truck AADT = 26,678* (9.64%), Year 2030, Along I-10

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
LOS F, Total AADT = 23,100, Truck AADT = 2,772 (12%), Year 2003 No Build (Alt 1), Along Cherry Avenue

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT
LOS F, Total AADT = 27,700, Truck AADT = 3,324 (12%), Year 2030 No Build (Alt 1), Along Cherry Avenue
LOS C, Total AADT = 39,800, Truck AADT = 4,776 (12 %), Year 2030 Alt 2, Along Cherry Avenue
LOS C, Total AADT = 39,800, Truck AADT = 4,776 (12 %), Year 2030 Alt 3, Along Cherry Avenue

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
See attached analysis

Comments/Explanation/Details *(attach additional sheets as necessary)*
See attached analysis

Particulate Matter (PM_{10} and $PM_{2.5}$) Analysis

The proposed project is within a nonattainment area for federal PM2.5 and PM_{10} standards. Therefore, per 40 CFR Part 93 analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

i. The proposed project is not a new or expanded highway project. The proposed project is an interchange reconstruction project that does not increase the capacity of I-10. This type of project improves freeway interchange operations by reducing traffic congestion and improving merge operations. Based on the *Traffic Analysis* (Meyer, Mohaddes Associates, October 2005), the proposed project would increase the capacity of Cherry Avenue. However, the traffic volumes along Cherry Avenue would not exceed the 125,000 average daily trips threshold for a POAQC. In addition, although the truck traffic percentage would exceed eight percent the total truck ADT would remain below the 10,000 vehicle threshold for POAQC. The future traffic volumes along Cherry Avenue are shown in Table A.

ii. The proposed project does not affect intersections that are at level of service (LOS) D, E, or F with a significant number of diesel vehicles. Based on the *Traffic Analysis*, the proposed project would reduce the delay and improve the LOS at intersections within the project vicinity. The LOS conditions in the project vicinity with and without the proposed project are shown in Tables B, C, and D.

iii. The proposed project does not include the construction of a new bus or rail terminal.

iv. The proposed project does not expand an existing bus or rail terminal.

Table A: 2030 Average Daily Traffic Volumes (AADT/ Truck AADT)

Roadway Link	Without Project Traffic Volumes	Alternative 2 Traffic Volumes	Alternative 3 Traffic Volumes
Cherry Avenue north of Valley Boulevard	23,600 / 2,832	29,900 / 3,588	29,900 / 3,588
Cherry Avenue between Valley Boulevard and Westbound I-10 Ramps	27,400 / 3,288	34,200 / 4,104	34,200 / 4,104
Cherry Avenue between Westbound I-10 Ramps and Eastbound I-10 Ramps	27,700 / 3,324	38,400 / 4,608	38,400 / 4,608
Cherry Avenue between Eastbound I-10 Ramps and Slover Avenue	21,300 / 2,556	39,800 / 4,776	39,800 / 4,776
Cherry Avenue South of Slover Avenue	10,000 / 1,200	32,100 / 3,852	32,100 / 3,852

Source: Meyer, Mohaddes Associates., October 2005.

Table B: 2030 without Project (Alternative 1) Intersection Levels of Service

Intersection		A.M. Peak Hour			P.M. Peak Hour		
		V/C	Delay (sec)	LOS	V/C	Delay (sec)	LOS
1.	Cherry Avenue/Valley Boulevard	0.96	45.4	D	1.16	83.8	F
2.	Cherry Avenue/I-10 WB Ramps	1.29	90.5	F	1.31	108.9	F
3.	Cherry Avenue/I-10 EB Ramps	1.67	184.0	F	1.32	105.0	F
4.	Cherry Avenue/Slover Avenue	0.92	37.1	D	0.85	34.3	C

Notes:

V/C = Volume/Capacity Ratio

LOS = Level of Service

Table C: 2030 with Proposed Project (Alternative 2) Intersection Levels of Service

Intersection		A.M. Peak Hour			P.M. Peak Hour		
		V/C	Delay (sec)	LOS	V/C	Delay (sec)	LOS
1.	Cherry Avenue/Valley Boulevard	0.74	29.7	C	0.83	34.0	C
2.	Cherry Avenue/I-10 WB Ramps	0.78	25.5	C	0.61	19.9	B
3.	Cherry Avenue/I-10 EB Ramps	0.62	17.1	B	0.84	24.0	C
4.	Cherry Avenue/Slover Avenue	0.77	21.6	C	0.86	30.8	C

Notes:

V/C = Volume/Capacity Ratio

LOS = Level of Service

Table D: 2030 with Proposed Project (Alternative 3) Intersection Levels of Service

Intersection		A.M. Peak Hour			P.M. Peak Hour		
		V/C	Delay (sec)	LOS	V/C	Delay (sec)	LOS
1.	Cherry Avenue/Valley Boulevard	0.74	29.7	C	0.83	34.0	C
2.	Cherry Avenue/I-10 WB Ramps	0.63	17.8	B	0.50	14.1	B
3.	Cherry Avenue/I-10 EB Ramps	0.62	17.1	B	0.84	24.0	C
4.	Cherry Avenue/Slover Avenue	0.77	21.6	C	0.86	30.8	C

Notes:

V/C = Volume/Capacity Ratio

LOS = Level of Service

Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM_{10} or $PM_{2.5}$ violation.